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# China Report

ECONOMIC AFFAIRS

No. 81



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## NATIONAL ECONOMIC POLICY

### RESTRUCTURING OF ECONOMIC SYSTEM DISCUSSED BY NOTED ECONOMIST

Beijing JINGJI YANJIU [ECONOMIC RESEARCH] in Chinese No 6, 20 Jun 80  
pp 3-11

[Article by Xue Muqiao [5641 2550 2890]: "A Probe into the Question of Changing the Economic System"]

[Text] Editor's note: Comrade Xue Muqiao's article on the restructuring of the economic system has raised some important questions of common concern to many departments and regions. There is now an imperative need for an all-round restructuring of our economic system, but this will involve many factors, such as the orientation in the restructuring and the questions of what steps to take, how to combine the restructuring of distribution with that of circulation and how to combine the restructuring of the system with the readjustment of the national economy; and these questions must be further studied and answered. The whole set of economic theories touched on have to be discussed extensively and intensively. This journal is offering space for this discussion and readers are cordially invited to contribute their articles.

#### I. Planned Regulation and Market Regulation

The most serious defect in our national economic management system in the past was the substitution of administrative methods for economic methods, and there was only planned regulation but little market regulation. After the Third Plenum, the combination of both planned and market regulations was introduced. What is planned regulation? What is market regulation? And what does a combination of these two regulations mean? At present, a hundred schools of thought are contending on this subject, and what I am going to say is only one of them.

Market regulation develops along with the growth of commodity economy. In a feudal society, there was a practically self-sufficiency economy,

and the market, even though there was one, played only a minor role. In a capitalist society, market regulation played the main role. The so-called market regulation is in fact regulation according to the law of value with a view to preserving a relative balance of supply and demand in the market. The socialist society develops from a capitalist society. Therefore, it has to inherit many things from the capitalist society and to change some of them instead of rejecting them wholesale. The productive forces (including science and technology) should in the main be inherited, but the relations of production should be changed (such as by establishing a system of public ownership of the means of production and practicing planned management of the national economy). Yet the number of items to be inherited are many (including most of the methods of market regulation). The capitalist countries have managed enterprises for two or three centuries and have accumulated a lot of experience. Most of these experiences should be inherited by us, though, of course, we do not inherit the bourgeois system of exploiting the proletariat. However, we still have to learn from their experiences in organizing and managing factories. Some of their methods of market regulation too have to be learned by us, because we, like the capitalist society, are carrying out large-scale socialized production instead of practicing a self-sufficient natural economy. For large-scale socialized production, the relationships between various trades and professions and various enterprises are very complex, and market regulation is necessary. It is true that capitalist market regulation means free competition, while our market regulation is guided by plans. We must be aware that as long as commodity production and commodity exchange remain, market regulation cannot be abolished. Marx envisaged the abolition of the relationship between commodity and money in a matured socialist society. However, practice has proved that this is not yet the time. The Soviet Union, soon after its founding, practiced War Communism and attempted to abolish the relationship between commodity and money. Later, it discovered that while the petty peasantry economy was still predominant, this relationship should be utilized instead of abolished. Therefore, Lenin later introduced the New Economic Policy which made full use of the commodity-money relationship. In our country, where capitalism had not fully developed, commodity economy should be encouraged instead of abolished even after the establishment of the socialist system. Of our national population, 90 percent were peasants in the early years of the Republic of the People. Even now, peasants still account for about 80 percent of the entire population, and three-quarters of the grain produced were used by the peasants themselves (as their own grain ration, seeds, fodders and so forth), while about 20 percent are procured by the state. Therefore, in the greater part of our country, the peasants' semi-selfsufficient economy is still prevalent, and production has not yet been highly socialized. Under these conditions, many comrades do not know the function of market regulation, although in Shanghai and some other large cities where capitalism had developed to a certain extent, people are well experienced in market regulation.

To many comrades, how to fully utilize the regulative role of the market under the control of state planning is a new question because of their inexperience. In fact, our country was more experienced and far superior to the Soviet Union in its early days. When New China was founded, we had many different types of economy, and in the winter of 1949, capitalist economy still played the dominant role in the market, because the majority of commodities in the market had to be supplied by the capitalist industrial and commercial organizations. At that time, we had to fight capital industry and commerce, and our first battle was for the stabilization of commodity prices. We never adopted any administrative (or coercive) measures; instead, we only used economic measures or the objective economic laws, mainly in Shanghai. It was quite a fierce battle, but we finally won. What followed was the placing of state orders with private enterprises for the processing of materials or the manufacture of goods, the establishment of a state monopoly for the purchasing and marketing of the products of private enterprises, and later the establishment of joint public and private ownership of enterprises. Even this battle with capitalism was carried out through the utilization of the law of value and the law of surplus value instead of administrative orders. In our fierce struggle with capitalist industry and commerce in the market, we defeated them at every round and forced them to accept socialist remodeling. Through placing orders with private enterprises for the processing of materials or the manufacturing of goods and the marketing of products of stateowned enterprises by private shops, the capitalist industry and commerce were forced to carry out their production and business operation according to state planning. We also controlled the rural market through the supply and marketing cooperatives, and, through our price policy, induced the peasants to produce according to state planning. This laid a solid foundation for the planned management of our national economy in 1953.

During the first five-year plan, the planned regulation of national economy played an increasingly important role. However, before the completion of the three major transformations and during the early stage of joint public and private ownership of enterprises (at that time, not many so-called "joint public and private ownership" of stores and handicraft cooperatives were responsible for their own profits and losses), the market still played a fairly important regulative role. Some comrades said that the first five-year plan was under a centralized management, and that it was well run and developed very rapidly. In fact, it was run under a combination of both planned and market regulations, with planned regulation playing the major role. Although cooperatives had appeared in 1956 and 1957, cooperation was in an initial stage. After all, it was not an entirely planned regulation then, and the regulation was fairly flexible and not rigid at all. After 1958, some people were influenced by the idea that socialist transformation should be as rapid and thorough-going as possible, and people's communes appeared everywhere in the countryside. In the cities, the stores under "joint public and private ownership" and the

handicraft cooperatives, all responsible for their own profits and losses, were abolished. In Beijing, for instance, the Dongan Market, which originally consisted of many small stores each having its own specialty became the Dongfeng Market. After the disappearance of all the specialties, it is now called the Second Department Store. The handicraft cooperatives have become cooperative factories, and instead of being responsible for their own profits and losses and distributing bonus according to the work done, they have to hand over their profits to the state and pay their workers fixed wages. Therefore, big collectives have in fact become enterprises owned by the whole people, and the system of socialist public ownership was beyond dispute. At the same time, because of our adoption of the planned administration copied from the Soviet Union, the decision-making power of enterprises, communes and production brigades was greatly reduced. In finance, all revenues and expenditures were handled by the state in a unified way, while in commerce, the state had a monopoly for the purchase and marketing of the products of private enterprises. Since then, only planned regulation has been stressed while the market's regulative role has gradually declined. Thus economy became increasingly ossified. Now, the vast majority of comrades realize that the present system of economic management must be restructured, and that the market's regulative role should be given full scope under the control of state planning. However, some comrades still feel that the planned regulation and the market regulation cannot be tolerated when planned regulation is practiced, and vice versa. Therefore, they often asked: How should planned regulation and market regulation be demarcated? And will market regulation interfere with the planned management of the national economy? Such ideas, in my opinion, are incorrect. Planned regulation and market regulation can co-exist and supplement each other and should not be set against each other like water and fire. All these misgivings were attributed to the mistaken idea of our market regulation--the mistaken idea that the only correct form of socialist planned management is the rigid control system which we learned from the Soviet Union in the early 1950's.

Many comrades who had learned from the Soviet system of planned control of the early 1950's held that only a unified handling of all revenues and expenditures by the state and a state monopoly for the purchase and marketing of the products of private enterprise can be called planned management. In financial matters, they think, the Ministry of Finance should control the unified accounting; in commerce, the Ministry of Commerce should be in exclusive control; and in industry the plans for production enterprises are completely separated from the market and the consumers, and all economic activities are undertaken according to the unified arrangement of several central departments, which will relieve the local authorities, enterprises and communes of the responsibility of thinking for themselves, as long as they can follow the plans. When I went to Jiangsu Province for investigation, many comrades there said that all the plans handed down from the central departments combined to form the provincial plan because the province could not make any adjustment. Therefore, the provincial authorities did

not have to use their mental power. The comrades in Wuxi and Changzhou reported that the plan handed down by the various bureaus of the province combined to form the municipal plans, and there was no room left for adjustment. Therefore, they did not have to use their mental power either. Anyway, everything would be in order as long as they follow these plans. Is this planned management? Is this socialist planned management? I doubt it. In theory, socialism implies that people are masters, everyone of whom should think for himself. Now, with the exception of the people in some departments at the central level, nobody can play the role of a master by thinking for himself. If even the enterprises, communes and production brigades have no decision-making power, and are expected to follow state plans only, there can be no managing power for the people to speak of. Is this consistent with Marxist socialist principles? Would it be better for "people above to be very brainy and people below to be brainless"? Or would it be better for the enterprises, communes and production brigade to exercise their mental power and for the working people to work out their own plans? The latter should be better, obviously. The question is that now that the decision-making power of the enterprises, communes and production brigades is recognized, how can the fulfillment of the state plan for national economic management be guaranteed? The key lies in "major planning and minor freedom" and "centralization of power in dealing with major issues and decentralization of power in dealing with minor matters." The central authorities will control the overall balance of the national economy and arrange the ratio between accumulation and consumption. In other words, they will arrange the scope of capital construction, take charge of the important construction projects, improve their people's livelihood, work out the ratios between agriculture, light industry and heavy industry as well as the internal proportionate relations in industry and agriculture. As long as revenues and expenditures, assets and liabilities, supply and demand of materials, and the foreign exchange are all balanced, the other jobs can be delegated to others and nothing can go wrong. What is wrong with us now is mainly because of the lack of an overall balance. In state planning, the overall balance should be carefully attended to. Yet we have failed to do it. Instead of streamlining the ratio between accumulation and consumption, we only attended to specific projects one by one. The result is that, on the one hand, people tried to work vigorously and quickly, thinking that it would be better to have a larger capital construction project; on the other hand, excessive speed in heavy industrial production caused a corresponding reduction of agricultural and light industrial production. Thus serious dislocations appeared in the means of production and in market supplies, and chaos was inevitable.

After the Third Plenum, the central authorities turned their attention to this problem and decided to readjust the ratio between accumulation and consumption, to reduce the scope of capital construction, and to raise the people's standard of living. Last year, we raised the procurement prices of agricultural and sideline products by a wide margin and thus increased the peasants' income. In 1977, 40 percent of the workers and staff members



were promoted. In 1979, again, we decided to promote another 40 percent of the workers and staff members besides offering them bonus. All these benefits have raised the ratio of consumption and at the same time reduced the investments in capital construction. We can say that all these policies on reducing the scope of capital construction, raising the standard of living of the people, particularly the peasants, increasing the peasants' income and readjusting ratio between accumulation and consumption, are entirely correct. Some problems have arisen, but they were mainly caused by the methods of implementing these policies and by an inadequate overall balance. Some dislocations were unavoidable.

Some comrades are not sure if the readjustments have been carried out correctly and efficiently, because they have doubts on the current situation. In my view, the situation of 1979 was better than that of 1978. First, the situation in the countryside has been greatly improved, and the peasants' income has been substantially increased. In the past, pork was rationed; now it is sold in the open market in abundance. In Zhejiang, procurement of pigs was very difficult, and quota procurement was necessary. Now, instead of quota procurement, there is a long line of peasants waiting to sell their pigs to the state. The situation of the countryside in 1978 was better than in 1977, and 1979 was even better than 1978. Since peasants form 80 percent of the national population, the peasants' increased income and better living symbolize a fine situation. Secondly, the workers and staff members in the cities have received increased wages and bonus. Although the prices of pork and eggs, among others have been increased, the state has granted subsidies, and there are more articles for sale in the market. Pork is now in abundant supply and other items are more plentiful than before. This is a striking difference from the situation during the 3 years of natural disaster. The abundance of agricultural sideline products in the cities shows a fine situation. Furthermore, bank deposits have increased for the first time in history. This increase includes local deposits as well as enterprise deposits. Previously, the communes and production brigades had to borrow money every year; in 1979, however, the amount of deposits exceeded that of bank loans. Savings have also increased for the people in both the cities and the countryside. In 1979, there was marked increase in national revenue, although some unexpected changes occurred in distribution, resulting in benefits for some and problems for other areas. This matter should be carefully studied. Anyway, we cannot say that the situation is poor simply because the work has not been properly carried out. The actual situation is not poor after all.

We have usually had controversies on the question of tightening and relaxing in the past. Formerly, "tightening means rigidity; relaxing means chaos; tightening is necessary for chaos and relaxing is necessary for rigidity." It seems as if there cannot be any other alternative. In my opinion, there was no relaxation at all in the 20 years from 1958 to 1977, as far as decision-making power for the enterprises, communes and production

brigades was concerned. In the several years of relaxation after 1958, greater decision-making power was allowed for some localities. The chaos which ensued was not because of excessive power for the localities, but rather due to vigorous and prompt action demanded by the central government. There was no overall balance; the heavy industry developed blindly at high speed; and the capital construction front was over-extended. In these several years, the ratio of accumulation was raised by about 40 percent, and in 3 years, the heavy industrial production increased by two and a half times; but agricultural production declined. The misguided local governments added something at every level resulting in a serious imbalance of the national economy. Such chaos were inevitable even though the power was not decentralized. The serious chaos in the national economy before 1976 were brought about by the sabotage of the "gang of four," instead of the decentralization of power. Since this imbalance has not been completely readjusted, certain chaos still remain. For the sake of readjustment and consolidation, centralized management needs to be strengthened in certain aspects, and we cannot be perfectly free in restructuring the system of economic management. For the same reason, we still have to proceed cautiously and steadily. We should first set up trial spots and popularize them when we have gained sufficient experience. However, we still have to change whatever can be changed, especially when such changes are helpful to the readjustment and consolidation. Our confidence and determination in restructuring must not be shaken. We should do our best to avoid major errors, although minor ones are inevitable. In fact, minor errors have their merits, because they reveal contradictions and then stir up our ideas for their resolution. There seemed to be no contradiction in the past systems of unified handling of revenues and expenditures and of unified purchasing and marketing by the state. The result was a rigid system. Therefore, in carrying out reforms, we must be prepared for some errors, though not serious errors. At present, some centralized and unified measures are temporarily necessary for a tight control during the elimination of chaos and restoration of order. However, they cannot be regarded as permanent policies.

Let us take for instance commodity prices and wages which are in a chaotic state. Many comrades feel that if the control of prices is relaxed, general and uncontrollable rise of prices will be inevitable. In fact, the rise of prices is the result of an imbalance of financial receipts and payments and the excess of currency issue to the actual needs for market circulation, or the result of the excess of social purchasing power over commodity supply. At present, our authority over price control has not been decentralized among the lower levels, and the rising prices have nothing to do with power decentralization. The relaxation of control over country fair trade have not led to any price increase as it did in 1960 and 1961. On the contrary, the prices have been slightly lowered, and in some places, the prices of pork, beef and mutton are actually lower than the listed prices. In 1960 and 1961, the rise of prices was brought about by currency inflation. We have now reduced our investment in capital construction and withdrawn billions of yuan from circulation by selling expensive commodities and other

methods. The market prices have registered a general fall and even the prices of expensive commodities have continued to decline until they can be sold at ordinary prices. The industrial and commercial enterprises of capitalist countries set their own prices, which can remain stable as long as there is no currency inflation. In our case, as long as there is no excessive currency issue over what is required for market circulation, our general price level can remain stable despite certain fluctuations. The present bonus system is quite confused, and this confusion has something to do with poor management and the fact that many workers and staff members have not had a wage raise for more than 10 years. Since the Third Plenum, the active role played by the readjustment of prices and the reform of the wage system has far outweighed their passive role on production development. Hereafter, further readjustment of prices and reform of the wage system according to the principle of exchange at equal value and distribution according to one's work, are still necessary along with the development of production. Contentment with the present situation cannot arouse the enthusiasm of the peasants and workers in production or bring about the high-speed development of production.

Since ours is a socialist country, we certainly cannot adopt a laissez faire policy as the capitalist countries would. We must practice the planned management of economy. The central task of planned economy is to attain an overall balance of our national economy. We have committed several errors in economic work in the past 20 years. Aside from the interference and disruption from Lin Biao and the "gang of four," the main cause was that we did not have an overall balance, thereby causing an imbalance in our national economy. In the first 8 years following the founding of the People's Republic, our national economy was fairly well balanced, our industrial and agricultural growths were fairly rapid, and the people's living conditions were gradually improving. Nobody had any doubt on the superiority of socialism then. In the 20 subsequent years, however, apart from the interference and disruption from Lin Biao and the "gang of four," we committed two blunders: Our faulty planning in some years which led to the imbalance of the national economy, and the rigid system of planned control which made it impossible for socialism to demonstrate its superiority. We are now gradually relegating the power of management to the lower levels, but the work of overall balance should still remain in the charge of the central government. The total amount set for investments and all large construction projects should be decided and approved by the central authorities and incorporated in a unified plan. The small and medium-size local projects, particularly the tapping of potentials and the renovation and transformation of equipment for old enterprises, should be decided by the local authorities and the enterprises; but such projects should also be included in the total accumulated funds controlled by the state although left in the hands of the local authorities. If the local authorities and enterprises want to make all out efforts on these projects without any restraint at all, they may upset the state plan and bring about an imbalance in the national economy. The total amounts of labor and wage fund should be set by the state, which should also announce the controlling figures, leaving the localities and enterprises to decide on the specific



arrangements. According to our experience over many years, the state should be in control of the relationship between state construction and the people's livelihood so that the total amounts of accumulation and consumption funds will not exceed the total national income. This is the most important problem to be solved by planned regulation.

The key to market regulation lies in widely opening the avenues of circulation and in breaking down the conventions whereby the means of production are exclusively controlled by the material departments, the consumer goods are exclusively controlled by the commercial departments, the agricultural and sideline products are exclusively controlled by the supply and marketing cooperatives, and all foreign trades are exclusively controlled by the foreign trade departments. With the development of production and a balanced supply and demand of commodities, the scope of planned distribution of the means of production and of state monopoly for the purchase and marketing of the product of private enterprises will be gradually reduced. Except for the major items of means of production (such as complete sets of equipment, coal petroleum and so forth), which can be directly supplied according to contracts signed by the producing and the purchasing parties and in conformity with state plans, ordinary materials can still be supplied by the material departments through their usual supply network. Some departments, bureaus, and large companies can also specially set up their own marketing organs, while some big cities can set up goods fairs and use various other methods to help supply one another's needs. Apart from grain, clothes and edible oil, the system of rationing for consumer goods can be gradually abolished, and state monopoly for the purchase and marketing of the products of private enterprises can be replaced by the system of placing orders or selective purchases for ordinary consumer goods. Commodities not procured by the commercial departments can be sold by the factories themselves. The supply and marketing cooperatives are permitted to operate in the cities while the communes and production brigades can also market their own products in the cities too. After all, the commercial network has been greatly enlarged, the links of circulation has been greatly reduced, and the gap between supply and demand has been filled. Will the adoption of these methods disrupt the socialist unified market? The answer is no. Our state-run commerce has a solid material foundation. Even before the transformation of private industry and commerce, state-run commerce had already controlled the market throughout the country. If we now allow some state-run factories, communes and production brigades to market their own produce, they can only play a supplementary role for the state-run commerce, but never undermine the leading position of state-run commerce or disrupt the socialist unified market. Competitions in the market are useful in eliminating bureaucracy and providing greater convenience to the people. Furthermore, they help improve the quality and increase the varieties and designs of products as well as the income of the peasants. They are welcomed by the people in the urban and rural areas.

Besides expanding the commercial networks, we should also fully utilize the functions of pricing, taxation and credit to support market regulations. The state adjusts the prices and tax rate to reward the enterprises (including factories, communes and production brigades) for increasing the production of the goods in short supply and for reducing the production of what is already in excessive supply, in order to maintain a balanced supply and demand. Furthermore, appropriate use should be made of the bank's role in leading the enterprises in the correct direction of production through the extension of loans and the adjustment of interest rates. Capitalist countries regulate national economy mainly through the banks, and can encourage or restrict enterprise investments by increasing or decreasing the amount of currency issue or by raising or lowering the interest rates. They can also support some and penalize other enterprises through the extension of loans. Investments in socialist countries are mainly arranged according to state plans, and small investments can also be supplemented by bank loans. The substitution of bank loans for financial allocations will encourage the construction units to economize on their funds. When interest is to be paid on the total circulating fund, it will induce the enterprises to reduce the piling of unwanted capital goods in warehouses. To facilitate commodity circulation, the restoration of certain commercial credit systems, such as down payments, bank mortgage, discount on promissory notes, private remittances and interests for deposits by government organizations and enterprises and so forth, should be considered, to facilitate fund circulation and to insure commercial credit. Instead of serving as a paying and receiving agency for the Ministry of Finance, banks will be able to offer greater services to socialist economy.

## II. How to Enliven National Economy

Because our control was too rigid in the past, we must now restructure the system in order that our national economy can be more flexible. To do this, there are generally three different plans: First, the present situation is to be basically preserved. This means that the power of administration has to be centralized in the central authorities, and part of the power is to be distributed among the lower level units, particularly by enlarging the decision-making power of the enterprises. This is a minor change. Secondly, the major portion of power is to be distributed mainly among the local authorities with corresponding increase of the decision-making power for the enterprises. Thirdly, economic methods are to be used. Economy is managed through economic organization, and under the guidance of state planning, a fairly large portion of the power is delegated to the enterprises. Of course, both the central and the local governments have their shares in management, but the stress is on greater power of management for the enterprises. These plans are open to debates. At present, the majority of comrades basically endorse the third plan. In 1978, I was on an inspection tour to Jiangsu, where the system of local responsibility for finance was being tried. I wanted to

find out about the result of this system and how the increased power for the province has worked out. The experiments in expanded local administrative power for the province and in the system of revenue sharing were quite successful. However, when I was soliciting opinions in Wuxi, Changzhou and Suzhou, the people there had different opinions. They said that since the central government has delegated its responsibility to Jiangsu province, the province should in turn delegate some responsibility to them so that the municipalities and counties would have greater power. Later, I talked to the people from eight different enterprises and tried to find out how they felt. They said that whether the central or the local government had the responsibility made no difference, because, in any case, the enterprises were not allowed to manage their own affairs. They felt that the question of administrative power for the enterprises is a crucial one. I thought over what they said for a long time and appreciated their feelings, because if enterprises have no right to manage their own affairs, they are like the beads of an abacus, which can only be manipulated by others. The control would be rigid no matter whether comes from the central or the local government.

Actually, however, people had different interpretations of the third plan. Among the central departments, the general opinion was that the power was not properly centralized, because in some way, it was over-centralized, and in other ways, it was not centralized enough. They felt that what should be centralized should be further centralized and that whatever should be delegated should be resolutely delegated. For example, the planning department talked about the reduction of investments for the current year. If the power were delegated to the provinces and the provinces were allowed to work out their plans, it would quite possibly be an increase of investments. Again, if the power is delegated to the enterprises to work out their own plans, the investments would probably be further increased, because everyone would like to tap their own potentials and renovate and transform their own equipment. Therefore, planning for capital construction must be centralized. Some people said that the control of materials was too centralized and rigid. But people of the material departments said that only 10-20 percent of the materials were in their custody while the vast majority were distributed among different departments, bureaus and enterprises and being kept in their warehouses. In order that the materials could circulate freely, the majority of them should be turned over to the custody of the materials department for centralized control, which is being practiced in the commercial departments. Therefore, centralization is still necessary. These views, expressed in various central departments, sound quite logical. Thus their "third plan" is somewhat closer to the "third plan" related to the first plan.

The localities, however, are in favor of expanded power for the localities to manage their own affairs. They want three- instead of two-level finance and two-level administration so that the municipalities and counties can be included in the system. Financial administration at different levels may create new problems, because the enterprises too naturally want

to be included in the system of self-management. If such large enterprises as the Anshan Iron and Steel Company and the Daqing Oilfield are controlled by the local authorities instead of the central government and if their profits are not handed over to the central government, then the revenues for the central government can hardly be guaranteed. On the other hand, if the Anshan Iron and Steel Company is controlled by the central government and affiliated to the Ministry of Metallurgical Industry, then how about the hundreds of factories supporting the Anshan Iron and Steel Company in Liaoning? Should they all be controlled by the central government? Certainly not. If they are not under the Ministry of Metallurgical Industry and remain under local control, then the cooperation of certain factories for this company cannot be counted on. Instead of cooperating with the company, they will look for some more lucrative business. In this case, will the Ministry of Metallurgical Industry establish hundreds of factories to support it? Again certainly not.

There is still another problem with local control. There are 29 provinces and municipalities (Taiwan Province excepted) in China. If there are 29 local governments and 29 different plans, it will be difficult to maintain the economic relations among these localities or to prevent self-imposed restrictions. Whenever there is self-imposed restrictions, economic life will certainly be strangled. In Europe, nine countries have joined the Common Market; therefore, it will certainly be inadvisable for our country to have a number of independent markets instead of a single "common market." This would be against the laws of economic development, particularly the laws of modernized economic development. Shanghai, for instance, is the economic center of the southeastern region as well as the whole country. If completely isolated from the rest of China, Shanghai cannot last long. This will be harmful not only to Shanghai, but also to the other regions throughout the country. Therefore, the second plan is definitely impracticable.

If finance is managed separately at different levels, the same system of management should apply to industry as well, since industrial profit is an important source of financial income. If industry is managed separately at two or three different levels, there will be some hindrance to the organization of specialized companies for specialization and cooperation. For example, if a nationwide (or transprovincial) automobile company is organized, it will include hundreds or even thousands of plants at the central, provincial, municipal and county levels. In the quest for profit, the party and government organs at various levels will be reluctant to abandon their control over the plants, and it will be difficult to replace the administrative management with economic management for industry. Then there will be a problem in the general orientation of the restructuring of the economic system. Furthermore, the present profits are handed over partly to the central and partly to the local government, and this also leads to many difficult contradictions between industry and commerce and between industry and trade (foreign trade). In future, we may have to consider changing the system of handing over profits and paying tax. It is now hard to say whether



of not the ratio of income tax for the central and the local government will bring about new contradictions. After all, we have not yet completely clarified the orientation for the restructuring, and many problems need further study.

Since the restructuring will involve the interests of various localities, departments and enterprises, there is bound to be some disagreement between different central departments; between the central departments on the one hand and the provinces, municipalities and autonomous regions on the other; between the rich and the poor provinces; between the provinces and their affiliated prefectures, municipalities and counties; between enterprises of the same trade at the abovementioned levels; and between the rich and the poor enterprises. We can only keep the overall situation in mind, and proceed from the realization of the four modernizations in correctly handling these contradictions. In my opinion, the restructuring of system cannot be carried out with a single method throughout the country because each locality has its own specific conditions. What is the purpose of the restructuring after all? Sichuan, for example, is very keen in restructuring and its achievements are quite remarkable. In the country as a whole, Sichuan is now in the intermediate stage of development and can be regarded as a typical example of the country as a whole. Its production is not yet highly socialized and has not yet developed to the stage of specialized companies, joint companies, trusts or syndicates. Therefore, the focus of their work is in decision-making power for the enterprises as individual units at first and later as joint enterprises. This work is being carried out independently within the province. Shanghai is an advanced region. In old China, Shanghai was where capitalism was most highly developed. At present, it is also comparatively more socialized and has closer relationship with the rest of the country. Therefore, restructuring in Shanghai is different from that in Sichuan, because Shanghai has already developed to the stage of trusts and syndicates. Instead of enterprises as separate units, the restructuring should be carried out on the scale of trades or companies, or the combination of companies and enterprises. Shanghai has the favorable condition of being ahead of others in the restructuring of the system. In fact, the scope of restructuring in Shanghai (as shown by the goods fairs for the means of production, and the free market for agricultural and sideline products) has already expanded to other provinces and municipalities. Generally speaking, it is highly desirable to open wide the channels for the circulation of the means of production and consumer goods. However, since some goods in short supply and even some products intended for planned procurement have been drawn into circulation, some contradictions are hardly avoidable. These contradictions should be resolved through consultation instead of blockades. In 1979, Shanghai used its own funds, machinery equipment and technical force for setting up joint enterprises in other provinces (compensatory trade) and this should result in mutual benefits. I think this practice should be encouraged. Many countries in West Europe have organized common markets; so cooperation should be strengthened among our provinces by breaking down the regional barriers. Self-imposed restrictions

are against the cardinal orientation of restructuring. Of course, Shanghai should help other regions in the manner of advanced units helping backward ones; and this can be easily arranged. Through the grouping of enterprises, communes, counties and provinces, a unified market can be formed naturally for the economy of our country, and this unified market can consist of a certain number of economic centers or trade centers. The economic activities of these centers can be intermingled and free from the restrictions of administrative regions.

There are two prerequisites for the restructuring: First, there should be financial management at each level. This will lead to many problems which are now under study. Second, the expansion of decision-making power for the enterprises with particular stress on profit sharing.

The expansion of decision-making power for the enterprises is now mainly manifested in profit-sharing, which is by no means a comprehensive expansion. In Shanghai, hundreds of enterprises of two trades (metallurgy and textile), are serving as experimental enterprises in profit-sharing. They have gained many experiences and at the same time exposed many contradictions. The most serious contradiction is inequity in the distribution of benefits and the sharing of hardship. At present, the readjustment of our national economy is not yet completed, and some enterprises, for certain external causes, cannot produce regularly. Therefore, large or small profit is determined by pricing, tax rate and so forth instead of the method of management. Some enterprises produce high-price and profitable goods; others produce low price goods with only a small profit margin. Among enterprises producing high-price and profitable goods, some of them (such as those producing tobacco and liquor) have to pay higher tax and make less profit; others (such as those producing wrist watches) make more profits and pay less tax. Even enterprises of the same trade have different profit rates if they produce different items (such as cotton and dacron). It would therefore be unfair to adopt the same method of profit-sharing. Many localities have adopted various methods for regulating the sharing of profits, and this further complicates the system of profit-sharing. Hereafter, we should gradually readjust the prices and the tax rates so that the profits for all enterprises will be more equitable, and more accurate in reflecting the result of business management. Furthermore, enterprises may operate under different conditions. New enterprises need not replace their machinery and equipment but old enterprises have to. Therefore, the proceeds from profit-sharing among different enterprises should be adjusted.

In Shanghai, bureaus or companies are used for experiment, and the proceeds from profit-sharing are divided among the bureaus, companies and the basic-level enterprises. In this way, the companies can use their share of profit to even up the gains of the basic level enterprises and help some of them renovate their machinery and equipment. If the share for the basic level enterprises is too small, it will not be conducive to the improvement of their business management.

At present, the expanded power of decision-making is only limited to profit-sharing and, in fact, many important problems, such as the problem of labor and wage management, are waiting for solution. Many enterprises are over-staffed. While they still do not know what to do with their surplus personnel, the labor departments have further charged them with the responsibility of accommodating a large number of sons and daughters of workers and staff members. Some plants have organized collective enterprises with responsibility for their own profits and losses. This has produced some good results in increasing production. However, other plants have passed their own jobs onto the "collective enterprises," and in effect increased the number of workers and staff members. With the huge number of young people waiting for employment, the "iron rice bowl" system, whereby the enterprise can only admit, but not discharge people, is likely to remain unchanged for quite some time. The system of promotion and rewarding according to the proportion set by the higher authorities makes it difficult for the enterprises to reform their own wage system according to their actual conditions or to more effectively implement the principle of "to each according to his work." Some plants have proposed that the enterprises be permitted to use their own methods of promotion and rewarding, provided the total wage fund is not exceeded. This proposal deserves consideration. The enterprises should also have the power of adjusting their prices within certain limits prescribed by the state. At present, many enterprises are requesting increased prices, and the state must exercise a strict control. However, in view of the many over-stocked goods, the enterprises should be given the power to sell them at reduced prices in order to avoid losses from corrosion or other damage. The price of some means of production are obviously irrational. Some goods are in excessive supply, because of high prices and good profits. Others are in short supply because of their low prices with a small profit margin. The relevant departments in charge as well as the local price control departments should comply with the enterprises' requests for early price adjustments. This should be beneficial instead of harmful to the national economy and the people's livelihood; nor will it reduce state revenue. Therefore, this should not become an protracted affair requiring approval at every level.

Restructuring means the expansion of not only the decision-making power for the enterprises, but also the entire commercial network which is equally important. Only thus can the economy be enlivened. In the past, there was only one channel of circulation--state-run commerce. The scarcity of channels means a large number of links and a very wide separation between production and marketing which in turn leads to discrepancy between production and demand. While some products have run out of stock, others are being over-stocked. If a socialist country does not solve this problem, our economy will lose all its vitality. Therefore, the commercial department have proposed that the system of state monopoly for purchasing and marketing be replaced by that of selective purchase and direct marketing. In the first half of 1979, some commercial department practiced the system of selective purchases. Since they were afraid that some commodities could not be sold, the amount of procurement was reduced. Therefore, some light industrial

enterprises had to operate under capacity and production slowed down. In the second half of the same year, these enterprises sold more of their products in the market and the procurement of commodities was also increased. This brought about an upswing of light industrial production. There should also be greater power for the marketing of agricultural and sideline products, so that the communes and production brigades can sell their own produce. Can the rural communes and production brigades engage in commercial activities? Some people have doubts about it, but I feel that communes and production brigades can engage in not only agricultural and industrial, but also commercial activities. The marketing of their own produce by commune- and production brigade-run enterprises is by no means an act of profiteering. In the past, farm products was hauled over a long distance to the market for sale, and this was branded as profiteering. This accusation is not justified, and some change must be made. The supply and marketing cooperatives alone cannot procure all the agricultural and sideline products. It is hard enough for these cooperatives to fulfill their procurement plans; therefore, the procurement of items outside the plans will be quite an extra burden. The agricultural and sideline products of the production teams and the commune members themselves, procured by the communes, can be either sold to the supply and marketing cooperatives or be kept for home consumption. In this way, the agricultural and sideline products can be completely disposed of.

After the opening of country fairs in various parts of the country last year, prices remained basically stable, or were slightly lowered. The prices of some products are still high for the time being; however, as long as the market is brisk and production is increased, the prices will naturally be lowered. The free market for agricultural and sideline products can become an important supplement to state-run commerce. The supply and marketing cooperatives should still be maintained in the rural towns for procuring and transporting the agricultural, sideline or special products of the communes and production brigades. These cooperatives can travel, and should still be depended on as the main channel of sales in distant markets. Like state-run commerce in the cities, they have established their leading position in the market which cannot be easily shaken.

Before the completion of the readjustment of the national economy, restructuring should go hand in hand with readjustment. Because of the reduced investment in capital construction in the current year, the orders placed with the machinery industry are greatly reduced. Part of the workers and staff members, as well as part of the machinery and equipment will be left idle. For a long time, machinery has been distributed strictly according to plan, and many old plants in need of replacement for their own equipment or in need of additional equipment, were left out of the distribution list. It is therefore very difficult for them to obtain the needed equipment. Recently, the central government called on the old enterprises to tap their own potentials and to renovate and transform their own equipment, and most of these enterprises are not included in the state plan. All machinery



plants should increase more avenues for production and under take the production of items outside the state plan. Shanghai has held a conference for the placing of orders and offered to produce various types of products outside the plan. Some plants even dispatched work teams to offer door-to-door services for the old plants and helped them repair or renovate various machinery and equipment. There seems to be a great future for this type of work. In Wuxi, the machine building industry run by the municipality, county communes and production brigades stopped producing certain over-stocked goods, and their production assignments were greatly reduced last year. However, the production of items outside the plan still kept them busy and in fact raised their output value by a wide margin. There are many old and decrepit plants in various parts of the country. If their needs are attended to, the machinery industry should have no worry of operating under capacity. Even the other industries (particularly light industry) can speed up the work of renovation and transformation and over-fulfill this year's production plan.

In coordination with the above jobs, it is also necessary to restructure the system of distribution of the means of production this year. In the past, the means of production (particularly the machines and steel products of numerous varieties) were too rigidly controlled. On the one hand, distribution was seriously inadequate. The placing of orders was extremely difficult and buyers from various enterprises had to scurry from place to place. On the other hand, goods, instead of being utilized, have for a long time been kept in the warehouses in huge quantities and left to rust. In the past several years, because of the over-extended capital construction front, there were serious dislocations in material distribution. After the curtailment of capital construction activities, the conditions have markedly changed. Instead of short-supply, there is now an over-supply of machinery products, and many items in excessive supply are now open to the market in abundance. Even the production of items in short supply are also undertaken by some factories. This year, therefore, we are entirely capable of enlivening the distribution system for machinery products, and procurement will be replaced by marketing. In Shanghai, the means of production service company have held goods fairs in which the long over-stocked goods of various bureaus, companies and plants were moved out of the warehouses for sale. The result was remarkable. In my opinion, it is necessary to set up permanent exchange buildings for the means of production and let the industrial bureaus, companies and large plants in various localities have their purchase and sales teams permanently stationed in these buildings so that they can cater to one another's needs and serve as a supplement to the material departments in carrying out the planned distribution (in addition to the establishment of specialized companies).

The supply of steel products was very tight in the past. Many bureaus, companies and plants stocked up their unused steel products and regarded them as "hard currency" as a medium of exchange with other parties. Now that investments on capital construction have been reduced, the demand for steel products has also correspondingly been reduced, and most of these products are in excessive supply. Therefore, we may be able to enliven the

the distribution of steel products this year, and the goods in excessive supply can be provided in abundance through the goods fairs if necessary. By this means, many steel products, hoarded as "hard currency" were moved from the small warehouses into the larger ones of the material control departments. In the past, even goods in excessive supply were still in demand, and curtailment of their production was inadvisable. Now goods in excessive or short supply are clearly demarcated, and it will be more convenient for the production and distribution departments to adjust the varieties and specifications, and to keep the steel products, formerly hoarded in widely scattered place, in a central location. They can then clear the way and keep these products circulating. Of course, this is still a vision, and a lot of efforts are required to transform it into reality. Anyway, as long as machinery and steel products, which are of numerous varieties, are under control, then such items as coal and timber, of which there are not many varieties, can be more easily handled. For many years, the question of restructuring the distribution system for the means of production has caused a lot of headache, and it is hoped that from now on, some major improvements can be made.

Local industry has flourished for many years, but the duplication of production has caused waste. It was like fighting a war of attrition with widely scattered forces. This year, it will be necessary to merge and reorganize many small factories, which have been set up under an irrational distribution of industry. Some trades should form joint or amalgamated undertakings, or specialized companies, in order to improve their production technology and business management. Some experimental spots have already been established in large cities like Shanghai, Beijing and Tianjin with very good results. This progress should be kept up and the experiences, after being summed up, should be gradually popularized. There are many lane- and alley-run factories in Shanghai and in the past two or three decades, their production has doubled several times. However, their workshops cannot be expanded, and, worse still, even their decrepit buildings cannot be rebuilt. They have now reorganized themselves, and besides carrying out internal readjustments, they also cooperate with the commune-run industry in the form of amalgamated undertakings. I think this is a very good way and should be popularized. Yantai Municipality of Shandong and Changzhou Municipality of Jiangsu have also had similar experiences. The integration of urban and rural areas, and of state-run and large collective industry and commune-run industry has gradually industrialized the rural areas nearby the industrial cities. These areas have become a new industrial as well as agricultural socialist countryside.

After all, readjustment should go hand in hand with restructuring. We have now gained some initial success in this respect, but there are still many problems and contradictions requiring serious study and investigation, and some way should be found for their gradual solution. The practice of combined planned regulation and market regulation will be far more complicated than that of purely planned regulation. If we want to do only a simple job, then we have to abandon market regulation and exercise a rigid

control on economy. If we want to enliven our economy, however, we have to use market regulation as well and let our economic work become more intricate. We must have the courage to defy difficulties, study the new situation, and promptly solve new problems. This is the only way for socialist modernization.

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## NATIONAL ECONOMIC POLICY

### REFORM OF REMUNERATION SYSTEM IN PEOPLE'S COMMUNES DISCUSSED

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[Article by Policy Research Office of Baynnur League CCP Committee of Nen Menggol: "A Tentative Discussion on Determining Wages Based on the Production Quota as Practiced by People's Communes"]

[Text] The system of determining wages on the basis of work done is an important aspect of business management in the People's Communes. The present method of determining wages on the basis of production quota is one form of this system. But is this a good form of determining wages on the basis of work done? Does it conform to the principle of distribution according to work done whereby equal remunerations will be given for equal work done and to the objective laws of agricultural economy? Will it arouse and stimulate the socialist enthusiasm of the agricultural workers? These are the questions with which the leadership at various levels and many economic workers are greatly concerned. Here we will present our preliminary views on which we hope the comrades on the agricultural and economic fronts will comment.

#### 1. A Form of Determining Wages Welcomed by the Masses

Fixed quota for agricultural labor includes the quotas of work time and amount. It refers to the amount of certain farm work which a laborer can complete within a certain time. It is the basis for determining the wages for work done (calculation of work points on the basis of work done) as well as the division of work among different groups or according to the seasonal contract system. At present, there are still 1,768 teams (being 43.6 percent of the total number of production teams) among the rural communes and production brigades in our Riverhead area practicing the system of fixed production quotas for small groups.

Practice has proved that those communes and production brigades which have successfully carried out the system of determining wages on the basis of production quota can more effectively develop their production and overcome equalitarianism. According to the investigations conducted by the Yongfeng

Production Brigade of Tuanjie Commune in Linhe County, the past system of calculation of work points on the basis of work done, had stifled the commune members' activism and caused a decline in production and income. In 1979, it adopted the system of calculating work points on the basis of assigned work quota in combination with other agricultural measures, and within 1 year, production improved. The total grain output was increased to more than 210,000 jin from 170,000 jin the preceding year, and the amount of marketable grain delivered to the state also increased from 56,000 jin to 112,000 jin. The average income of each person increased from 103 to 174 yuan. From this, we can see that the system of determining wages on the basis of production quota has demonstrated its merits and is welcomed by the masses. Its merits are as follows:

1. The system of determining wages on the basis of production quota takes into account the amount and the intensity of labor. He who works more gets more; and he who works less gets less. The spectacle of loafing on the job caused by equalitarianism has been markedly reduced.
2. "Everyone is equal before the production quota," equal wages for equal work, equal pay to both men and women for equal work, and other principles can be enforced.
3. In combination with contract work for small groups (or seasonal contracts), the system of determining wages on the basis of production quota enables the commune members to enjoy more "small freedom" when they have completed their shares of work. They can either do above quota work, study or attend to their household chores.
4. In determining wages on the basis of production quota, mistakes in recording can be discussed and corrected, thus helping strengthen unity.

## II. Determining Wages on the Basis of Production Quota Is a Negation of "Basic Points"

In the early stage of cooperation, the system of "calculating wages according to basic points" which takes into account the worker's physical condition, his technical skill, and the number of work days (or hours) and calculates his wages (workpoints) according to the basic points. This is called "basic points with fixed recording," which was gradually changed to "basic points with flexible assessment," "Fixed recording," "flexible assessment," and "annual assessment of work points" are all based on a fixed quota of work hours with some equalitarian features which is inconsistent with the Marxist-Leninist principle of distribution according to work done.

Marx pointed out: "Labor is, in the first place, a process in which both man and nature participate, and in which man of his own accord starts, regulates and controls the material re-actions between himself and nature."<sup>1</sup> He classified this process into latent labor, living labor and materialized



labor. Latent labor refers to the labor power of a workers which has not been used. The use of latent labor in the process of production in any form is called living labor. "While the laborer is at work, his labor constantly undergoes a transformation: from being motion, it becomes an object without motion; from being the laborer working, it becomes the thing produced."<sup>2</sup> This means that in the process of production, some material object is produced. This is called materialized labor.

The "basic points" in "basic points with fixed recording" only shows a certain commune member as having "latent labor" but the latent amount is not the same as what has been actually expended in the process of production (living labor). Marx said: "A machine which does not serve the purpose of labor is useless."<sup>3</sup> The same principle applies to laborers. As we can imagine, if labor power is not expressed in practice, the latent capacity is after all latent and cannot form the basis for the calculation of work points and determination of wages. Thus we can see that "basic points with fixed recording" is not scientific.

"Basic points and flexible assessment" means the flexible assessment of work points and wages on the basis of the basic points determined after discussion and of the work time and amount actually spent in the practice of production. Although relatively progressive compared with "basic points with fixed recording," the system of "basic points with flexible assessment" is still inseparable from the "basic points," and there is no criterion for being "flexible." Therefore, the determined wages can hardly be fair and can easily lead to disputes and disruption of unity. Also, since assessing the performance of each worker individually is a complicated and time-consuming task, the result will be equalitarianism or equal distribution regardless of the quality of work.

To meet the requirements of organized collective labor and the development of collective production, we have in practice replaced the systems of "basic points with fixed recording" and "basic points with flexible assessment" with the system of determining wages on the basis of work quota and, on such a basis, the methods, "three contracts and one reward," "work for small groups," "seasonal contract," and "quality work points" were adopted. All these methods are the outcome of the development and application of the system of determining wages on the basis of production quota, and an improvement upon the "basic point" method. They have positively promoted agricultural development.

### III. Limitations of Determining Wages on the Basis of Production Quota

When the level of production is low; production is carried out on a "self-sufficiency" basis; the reserve wage fund is low; and the commune members remunerations are generally based on work points, determining wages on the basis of production quota is more rational than the "basic points system." With the further development of agricultural production, however, the use of production quota as the basis for determining wages begins to show its flaws.

First, the cycle of agricultural production is long, and there are many types of work, many different procedures, and many different varieties of indirect activities. Particularly in areas where economic zones for the division of specialized work are not clearly demarcated, a "small and all-inclusive" production team usually has over 100 different work procedures and more than 300 different quotas. Therefore, the more intensive is the management, the more meticulous will be the quota, and the more complicated will be the work. The use of the quota system will be very complex.

Secondly, work quota generally reflects the time, amount and intensity of work, and can easily solve the problems caused by the "more or less work makes no difference" idea; but it cannot fully reflect the quality of work. This can easily lead to a "scramble for large assignments" and the problem of "large quantity but poor quality" or "good or poor quality makes no difference." That is why some production teams use the method of "quality points and production quota" as a remedy.

Thirdly, determining wages on the basis of production quota is not directly linked with the results, benefits and output value produced. In other words it is not closely related with the workers' material benefits. Therefore, many communes and production brigades have adopted the method of "we know things 1 year in advance"<sup>4</sup> to keep up the morale.

Fourthly, determining wages on the basis of production quota can hardly be accurate, if carried out annually or even quarterly. If it is too strict, the commune members will complain of not being duly rewarded; if too lenient, there will be a depreciation of work points.

Fifthly, since production continues to develop, the quota, which is fixed, cannot promptly reflect the newly changed situation. At present, the work quota is mostly based on the old methods used by the cooperatives of the advanced type or the communes in their early stage. Therefore, contradictions between old quota and new equipment have appeared. As we can often see, push carts with wooden wheels are now replaced by carts with rubber tires or even motor cars; animal drawn wagons are now replaced by sowing machines; the use of buckets for irrigation is now replaced by the methods of gravitation and spraying; and so forth. Also, along with the development of the social division of work, and the increased methods of agricultural production, many new types of work are needed in the countryside as shown by the appearance of tractor operators, farm machine operators, bare-foot doctors, veterinarians and other technicians. All these changes call for new quotas and new control methods.

#### IV. Causes of Production Limitations

The system of determining wages on the basis of work quotas has left a deep imprint on present agricultural productions.

First, the lack of uniformity in remunerations from the state to the production team and from the production team to individual workers. State remunerations for the production teams are based on commodities. When a production team delivers more commodities of value, the state will give more money (or industrial products) to the production team, and the work points in the production team will rise. Here, prominence is given to production, output and output value. Of course, the prices of agricultural products set by the state are based on the amount of socially necessary labor, the scissor difference and similar factors. The state does not consider the actual amount of labor (the degree of intensity and complexity) put in by the production team or the benefits from "differential rents." However, since the collective economy of production teams includes their responsibility for profits and losses, they must safeguard the livelihood of the commune members, replenish whatever has been expended in the process of production, and raise funds for their own expanded reproduction. That is why instead of the output and output value, the production teams have to use the amount of work as the basis of remunerations. Thus the state deals with the collectives, and the collectives deal with individuals with "two different skins."

Second, the restrictions on agricultural production from the laws of natural conditions for plant growth in addition to the effects of economic laws. The process of economic reproduction and that of natural reproduction crisscross each other. Agricultural labor (especially for agriculture in cold region at the higher latitudes) must begin at the appropriate time according to the natural conditions and the characteristics of plant growth, (this applies to sowing and animal breeding) and be suspended or stopped at the right time (and this applies to the delivery and protecting of young animals or harvesting). Marx said this about agriculture: "The working period and the production period do not coincide in these cases. The production period is longer than the working period. But the product is not finished, not ready, until the production period is completed."<sup>5</sup> In other words, the time and amount of labor spent by an agricultural worker cannot be accurately expressed in terms of the seeds and fruits for quite a long time.

Furthermore, the total labor amount spent through the entire cycle of agricultural production represents the accumulation of certain types of work, procedures, auxiliary work and units of labor, and the labor amount spent on each individual type of work or procedure cannot be directly expressed in terms of output or output value. Yet work quotas precisely reflect (or is based on the calculation of) the amount of labor spent by individual types of farm work, and the number of work point he deserves. These work points naturally have no relation to the output or the output value. This is what people usually say about "work points" although the meaning of "work point value" is not yet clear.

Consideration of the limitations of determining wages on the basis of production quota prompts us to quickly discover new methods of determining wages



Consideration of the limitations of determining wages on the basis of production quota prompts us to quickly discover new methods of determining wages according to the special features of agricultural production in order to increase production, develop collective economy and solve the problems of "two different skins" on which remunerations are based and of the dislocation between "work points" and "output value."

## V. The Way of Reform

Engels said: "The method of distribution essentially depends on how much there is to distribute, and this must surely change with the progress of production and social organization. Therefore, the method of distribution will also change."<sup>6</sup> In the past 20 years and more, we have many times changed the methods of remunerations and strived to follow the principle of distribution according to work done and to suit the objective realities in the development of agricultural production.

Judging from our experiences in recent years, the methods for reforming the system of determining wages on the basis of production quota are, first, to proceed from realities and to take measures commensurate with local conditions in making up whatever we lack in order that the existing system of work quota will continue to improve and collective production will continue to develop. For example, some production teams in our region are particularly concerned with the addition and revisions of labor quotas, such as quotas for feeding animals, planting fodders and so forth. Based on the existing types of work and the operating conditions of technical equipment, and guided by the volume of work (or business) and operating expenses in the past 3 years, new quotas for work (or business), consumption (including the consumption of diesel oil, electricity and raw and semi-finished materials), expenses (including maintenance and repair expenses), duration of equipment, output value handed over to the state (in case of animal husbandry, there are quotas for young animals born and the amount of meat produced), are worked out for all types of work after discussion. Thus agricultural management over various types of work and procedures will follow the pattern of an enterprise operation which will help reduce remunerations based on work time and increase remunerations on a piece-work basis to the maximum extent.

The second method is to take full advantage of various natural conditions on the basis of correctly implementing the party's agricultural policies and rural economic policies. We will take advantage of the useful and avoid the harmful natural conditions in order to bring about an all-around development of agriculture, forestry, animal husbandry, sideline occupation and fishery and to enable the communes and production brigades to build up a reserve fund to be used for distribution (or, as some people call it, the means of living). This fund will be distributed among the commune members annually or quarterly, so that they can have a certain amount of income from the wages. Their expended labor and individual benefits will be directly linked through money. At present, some well-to-do teams in which individual members annually receive 300-500 yuan, are trying to

change the work point system into wage system (or semi-wage system). This seems to be the correct orientation.

The third method is the "calculation of remunerations on the basis of output." Because of the highly diversified natural conditions, management experiences and so forth, there are also many forms of calculation of remunerations on the basis of output. In some localities, calculation is based on assessed output; in others, calculation is based on an actual check on the output. Some localities offer above-quota rewards; and other localities calculate remunerations on the basis of the value of what has been delivered to the state. The system of determining commune members' wages on the basis of output or output value agrees with the system of state remunerations for the collectives. The best part of this system is the close relationship between the material gains or losses of the farm workers and the increase or reduction of collective output or output value, according to the principle of "more work, more production, more delivery to the state and more income." The increase or reduction of output is in direct proportion to profit and loss. At the same time, even small groups (or individuals) will be responsible for the quality of work and the way of management, thus enhancing the sense of responsibility and job interest among the individual workers and correcting the tendency toward "striving for only work points but not output" and "indifference to work quality" as shown by the scramble for larger quantities of work. Instead, people will be concerned with increased production and increased income, and everyone will offer good suggestions and ideas. According to investigations conducted by Erduqiao Commune in Hanggin Hou Banner, after "calculating remunerations on the basis of output," 39 out of 45 (85 percent) production teams showed increased output and income; two of them showed increased income from the same output; and four of them show decreased output. The total output of beetroot was only 800,000 jin in 1977 and 1.8 million jin in 1978. In 1979, when the system of reward and punishment based on the output was introduced, the production of beetroot sharply increased to 8 million jin. No. 1 Hongxing Production Team of the same commune sowed 40 mu of sunflower. The cadres did not pay any attention to it and the sunflowers were left at the mercy of the animals. As a result, even the seeds could not be recovered. In the spring of 1979, the system of calculating remunerations on the basis of output was enforced. The sunflowers planted to 40 mu of saline-alkaline land yielded 30,000 jin or 15,000 yuan's worth, of melon seeds in early autumn. Similar instances can be found almost everywhere.

Practice has proved that "calculating remuneration on the basis of output" is a better form of remunerations at present. All localities are now continuing their investigations, summing up their experiences and popularizing this system. It is believed that after a certain period of practice, this new method will be further improved and will be more effective in arousing the socialist enthusiasm of workers and in accelerating the realization of the four modernizations.

(This article is written by Comrade Hong Yexin [3163 5102 6580], Director of the Policy Research Office.)

#### FOOTNOTES

1. Marx, "Das Kapital" Vol 1, People's Publishing House, 1975 (same as following) pp 201-202.
2. Marx, "Das Kapital" Vol 1, p 214.
3. Marx, "Das Kapital" Vol 1, p 207.
4. Editor's note: Based on the plan of production and distribution for the whole year, the production teams stipulates the amounts of labor and manure required from each commune member at the beginning of each year. The amount of distribution for each commune member, in cash and in grain, is then worked out. This information is given to the commune members concerned in advance so that they will have an idea of how much will be their shares.
5. Marx, "Das Kapital" Vol 2, p 267.
6. Engels, "To Conrad Schmidt" (5 August 1890)" "Selected Works of Marx and Engels" Vol 4, p 475.

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## NATIONAL ECONOMIC POLICY

### RELATIONSHIP BETWEEN ENERGY CONSUMPTION, ECONOMIC DEVELOPMENT STUDIED

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[Article by Rong Donggu (1369 3159 6253) of Natural Resources Investigation Committee of Chinese Academy of Sciences: "Relationship Between Energy Consumption and National Economic Development"]

[Text] Energy is an important material condition for developing the national economy and raising people's standard of living. The consumption of energy has continued to increase along with the development of the national economy, and there is a growing reliance on energy for social production and people's livelihood. Without energy resources, the production of enterprises will come to a standstill, and social life in the urban and rural areas will be paralyzed. Since the founding of the People's Republic, the production of energy has undergone great development and increased 26-fold. However, it is still insufficient for our national economic development, and some strain has been caused by the shortage of energy supply in meeting the demand. Quite a number of machines for industrial production are now inoperative because of the shortage of power, and the production of energy is now an outstanding problem in our present national economic development.

The system of energy resources includes such links as production, processing, replacement, transportation and utilization, and each link is related to a certain economic department. Therefore, the relationship between the forming of an energy system and the development of the national economy involves very many factors and includes many complex problems. Here I will simply make some preliminary observations on the relative growth and decline of two essential factors of energy consumption with a bearing on the national economy.

#### 1. Changes in the Structures of National Economic Departments and Energy Consumption

The amount of energy consumption and the structure of the departments concerned is based on the development and changes of various sectors of the national economy. The same amount of total national economic output may call for different amounts of energy consumption because of the changes

in the structure of the national economic sectors. Modern industrial countries consume more energy than agricultural countries, and the number of production departments, which are heavy consumers of energy, has a direct bearing on the level of energy consumption in industry. Because of the ban on oil export by the Middle East countries and the drastic increase of oil prices after 1973, some countries have usually readjusted the structure of their economic departments in order to reduce energy consumption; that is, by reducing the departments which consume more energy, by increasing those which consume less in production, and by transferring the industries consuming more energy to other countries, as a means of reducing energy consumption on the total output value.

In using energy and in developing and changing the structure of the departments concerned, we should consider the reduction of energy consumption and develop those economic departments which have high output value and yet low energy consumption, and proceed from realities at different periods of national economic development. In the past 2 years, it was necessary to consider the readjustment of the various basic proportionate relationships in the national economy in order that the production and consumption of energy will be helpful to a rational readjustment of the ratios between accumulation and consumption, between industry and agriculture, between light and textile industries and heavy industry, and between the raw material and fuel industries on the one hand and the processing industry on the other, in our national economy, and in order to insure the planned and proportionate development of our national economy.

The readjustment of ratios between accumulation and consumption and between the production of the means of production and that of consumer goods, demands that we should suitably readjust the ratio between civilian energy consumption (namely nonproductive energy consumption) and productive energy consumption. The present imbalance between accumulation and consumption in our national economy and the backwardness of the production of consumer goods as compared with the production of the means of production shows that in the total energy consumption, the ratio of civilian consumption is unduly low and the supply of fuel to the people in rural areas is seriously inadequate. In the United States, England, France, West Germany and other economically developed countries, civilian consumption of energy amounts to nearly one-third of the total consumption. If the use of petroleum for Private cars is taken into account, then the civilian consumption in the United States will exceed 40 percent. In Japan, the ratio of civilian energy consumption is a little lower, being 25 percent, and the average annual consumption for each person is equivalent to 0.84 ton of standard fuel. These countries all use coal, petroleum, natural gas and other commercial energy. In countries with large populations and using a great deal of noncommercial energy, the ratio of civilian consumption in the total consumption is even higher. According to information gathered from a study by sampling, the makeup of energy supply in India in 1970-1971 consisted of the following: 47.6 percent is noncommercial energy obtained from wood and animal and agricultural wastes, and the civilian consumption of fuel



accounted for 57 percent of the total energy consumption, averaging 0.44 ton of coal (or 0.32 ton of standard fuel) for each person annually. India is located in the tropical and sub-tropical zones, and the civilian use of fuel is mainly for cooking and lighting, because heating is not required in winter. Countries in the temperate and the frigid-temperate zones, have to use fuel for heating in winter, and the fuel thus used form a portion of civilian consumption.

Our country also consumes a large amount of noncommercial energy. At present, the annual civilian consumption of mineral fuel is about 100 million tons of standard fuel, of which only slightly more than 1,800 tons are used by people in the countryside where the fuel consumed is mostly in the form of firewood, the stalks of agricultural crops and other plants. According to a rough estimate, the amount of plant fuel consumed in the countryside is about 300 million tons, or one-third of the total energy consumption, and the total civilian consumption of fuel amounts to only 45 percent of the total energy consumption, averaging 0.4 ton for each person annually. There is now a general shortage of fuel in our agricultural areas--usually a shortage for 3 or 4 months, and in some serious cases, 6 months each year--where shortage is serious.

The high consumption of plant fuel in the countryside has added to the burden of rural economic development. The stalks from agricultural crops and other plants are not only energy resources, but also fertilizers, fodders, construction materials and light industrial raw materials. Their use as fuel in large quantities inevitably lead to serious problems with agriculture, animal husbandry and the related light industry. Because of the scarcity of fuel, the stalks in agricultural areas cannot return to the farmland and thus the fertility of the soil is lowered. In many places, trees are being excessively felled, and the reduction of afforested areas increased soil erosion. All this will bring serious damage to the natural environment and to biological resources from water and soil. The destruction of natural resources has long-lasting effects on the national economy and a heavy price will have to be paid for their recovery, which, furthermore, is time consuming. Therefore, the problem of energy resource in the countryside is a very urgent one.

Our countryside is huge and populous, and the large-scale use of plant fuel will probably continue for a long time. Firewood will remain as an important fuel in the countryside; therefore, it is necessary to plant more trees in order to produce more firewood. We should also popularize the use of marsh gas in the agricultural areas and use more plants as fodders, fuel and fertilizer. Furthermore, we should adopt measures suitable to local conditions for utilizing hydropower, windpower, geothermal and solar energy in different localities. For future development, the solution of the problem of rural energy resources must go hand in hand with agricultural modernization, so as to gradually increase the consumption of coal, petroleum, natural gas, electricity and other commercial energy in the countryside, and to reduce the consumption of plant fuel. Plant stalks

will then be returned to the farmland to preserve or improve soil fertility while the forest will have an opportunity of recovery and the forest cover will be gradually expanded. This is a basic strategic measure which cannot be taken lightly. Unless the problem of substituting commercial energy for plant fuel is solved, all talks about preserving natural resources and the ecological equilibrium will be futile.

As to the rational use of energy resources and raising its utilization rate, the use of mineral fuel as a substitute for plant fuel also sounds reasonable. The efficiency of plants as fuel is quite low, and the average per capita consumption required each year will be reduced along with the lowering of the ratio of plant fuel in civilian fuel consumption. In America, wood used as fuel amounted to 90.9 percent of the total energy consumption, averaging 2.78 tons of standard fuel, for civilian use. In 1880, fuel from wood amounted to 53 percent, and the per capita consumption dropped to 1.7 tons; in 1955, wood fuel amounted to 2.6 percent, and the per capita consumption further dropped to 1.36 tons. The use of mineral fuel as a substitute for plant fuel has become a trend of the time in the utilization of energy.

Aside from the rural consumption of plant fuel, the makeup of our commercial fuel consumption is: for civilian use, 15-16 percent; for industry, 70 percent; for agriculture, 9 percent; and for transportation and communications, 5-6 percent. Energy consumption for nonproductive purpose amounts to one-sixth of the total amount. Productive energy is mainly used in industry. Energy consumption, in its present makeup, shows our national economy's prime concern for industry and production, while agriculture and circulation are treated as matters of secondary importance. Aside from suitably raising the ratio of nonproductive energy consumption during the present readjustment of relationships among various sectors of the national economy, the proportion of energy consumption on agriculture, raw material industry and transportation and communications in productive consumption should also be correspondingly readjusted.

Agriculture is the foundation of the national economy, and grain and the many raw materials for the light and textile industries are supplied by agriculture. Chemical fertilizer insecticide, drainage and irrigation equipment, farm machines, the means of transportation and the machines for the dehydration of agricultural products, directly needed to raise agricultural output, all require high energy consumption, and there is also the tendency toward increased energy consumption on each unit of farmland. In a certain sense, increased agricultural output comes from the use of energy resources. In America, in 1970, each hectare of crops yielded 5 tons, and the amount of energy consumed on various types of related farmwork was equivalent to 1 ton of coal. Our farmland is limited and our population is so large; so the only way for us to increase agricultural output is to increase the per-mou yield and by using more energy. In view of our large agricultural manpower and the frequent visitations of natural disasters, such as drought and flood, the rate of energy consumption should

be higher on the production of chemical fertilizers and on drainage and irrigation in the total consumption.

Raw and semi-finished material industries, including the metal, construction material and organic synthetic chemical industries, consume more energy than other departments do. Steel, iron, copper and aluminum are the materials used in huge amounts in our national economy. Because of the lower grade of our metal products and the increasing difficulties in mining, energy consumption in metal mining and smelting is also continuing to increase. In America, the mechanical power now used for extracting the same amount of metal is five times what was required in the 1950's. Generally speaking, the production of a ton of steel costs more than 2 tons of energy; the production of a ton of aluminum, from mining to its appearance in the form of ingots requires about 7 tons of coal; and the production of 1 ton of copper requires 20 tons of coal.

Organic synthetic chemical industry, using coal, petroleum, natural gas and other mineral fuels as raw materials also consumes large amounts of energy. The production of plastics, synthetic fibers, synthetic rubber, synthetic leather and other new materials consumes huge amounts of fuel, but this is necessary for the supply of raw materials for chemical products. It is estimated that the production of a ton of plastic costs approximately 3 tons of coal.

Raw material industry is the department consuming most energy in production. Its consumption on the average more than triples that of other industrial departments for the same output. In 1973, the total output value of the steel and chemical industries in Japan amounted to only 18.1 percent of the total output value of all the industrial departments, but the energy consumption by these two industries reached 63.7 percent, and the consumption on each unit of output value was 3.4-3.8 times the average amount consumed by other industrial departments.

We have rich metal resources and mineral fuel deposits which are urgently needed for our national economic development, and the conditions are favorable for the speedy development of various metal materials and new organic chemical materials; therefore, the raw material department is indispensable in establishing an independent and complete industrial system throughout the country. Since the raw materials supplied by agriculture is not adequate for the needs of the ever-increasing light and textile industries, it is now consistent with the trend of time to develop various new synthetic materials as substitutes for part of the cotton, hemp, silk, wool, bamboo, timber, leather, natural rubber and other agricultural raw materials. Since the readjustment of the national economy, agriculture, light and textile industries, and the raw material industry have been further strengthened, there is a growing need for energy resources to keep pace with the expansion of social production and the improvement of people's livelihood. Therefore, the production and supply of energy resources should be consistent with this trend.



At present, the supply of energy in our country is very tight, for the reason that in production, there is an imbalance among various links inside the existing energy resource bases, while the verification of deposits is not fast enough for the growth of production. In the process of setting up a new energy resource base, from prospecting to designing, construction and finally commissioning, about 10 years are required. This cannot meet our immediate needs. There is also serious waste in the use of energy. In such circumstances, the basic solution is to stress the need for broadening the resources and curtailing the consumption in the near future.

For a radical solution of the long standing problem of tight energy supply, we must have the determination to give priority to capital construction for the energy departments in making investments. The investments should be allocated among rebuilding, expansion and new construction projects as well as short-range projects. For long-range projects, plans should be worked out every year, starting immediately; otherwise there will be no guarantee of energy supply for the fast-growing needs of the modernization drive.

Aside from outdated equipment and backward techniques of utilization, the waste of energy resources is also attributed to poor management. Along with the current restructuring of economic management, we should set up and practice a sound energy control system. The restructuring of those units having outdated equipment and work process should be carried out according to their relative urgency, but priority should be given to projects requiring small investments and short construction times, but showing outstanding results in energy conservation. The improvement of production techniques and the raise of the energy utilization rate is a long-term task, and must be coordinated with developments of social productive forces and the machine-building industry because, without large-scale development of the machinery building industry, the technical efficiency of energy utilization in the society cannot be appreciably raised.

## II. Improvement of Power Machinery Equipment and Use of Advanced Technology as Key Measures for Raising the Technical Efficiency of Energy Utilization

Of the total energy consumption, only a small portion is used for industrial raw materials, and the vast majority is used as fuel. Therefore, the adoption of advanced technology to raise the technical efficiency of energy utilization and to reduce energy consumption is of great significance to economic development.

Technical efficiency in energy utilization refers to the ratio between the caloric value of the coal being burned for the boiler, and the caloric value of the steam power actually consumed in production; the technical efficiency of converting energy into steam power refers to the ratio between the caloric value of the fuel directly consumed in a steam boiler

and the caloric value of the mechanical energy actually gained from the use of steam-power; and the technical efficiency of converting energy into electric power refers to the caloric value of fuel consumed in the power generating station and the caloric value contained in the generated power. Under given conditions, the amount of energy consumption in the national economy is in inverse proportion to the technical efficiency, the lower will be the energy consumption. Therefore, to raise the technical efficiency in the use of energy is an important measure for energy conservation. At present, the general technical efficiency in the use of energy among some economically developed countries in the world is fair high. Japan's is now over 50 percent; and those of America and the European countries are all above 40 percent. Since ours is not yet up to 30 percent, there are still great potentials in our energy conservation.

The efficiency of converting primary energy resources into thermo energy is higher than its conversion into mechanical energy. In the 1860's, England used the open hearths for heating, the thermo energy efficiency rate was 15 percent, and the efficiency rate of mechanical energy converted from steam power, which had been obtained by burning coal, was only 2 percent. The general efficiency rate of energy utilization was less than 10 percent. In the 1950's, the method of centralized heat supply used in America had a thermolysis rate of 70 percent; but the efficiency of conversion into mechanical energy was only 13.6 percent, and the general efficiency of energy utilization was 35-40 percent. From this, we can see that the conversion of primary energy resources into thermo energy and mechanical energy have different ratios which directly affect the general efficiency level of energy utilization. With a larger ratio in the conversion into thermo energy, the general efficiency can be raised more rapidly and energy conservation will have obvious effects; on the contrary, if the ratio of conversion into mechanical energy is larger, the general efficiency will be lower. However, we must also note that mechanical energy can replace human labor on a large scale and is helpful in raising social labor productivity and then in raising the productivity of the national economy. Therefore, the general energy efficiency of a country must be considered in the light of the development of the entire national economy. During the modernization drive, mechanization in the national economy is faster, so the conversion of energy into mechanical energy should be correspondingly increased. The ratio between the conversion of primary energy resources into thermo energy and its conversion into mechanical energy was 60:40 during the 1860's in England and the 1950's in America. In England, the principal source of energy was coal, and in America, it was petroleum and natural gas. In view of our large population, civilian consumption of energy should be more in the form of thermo energy, while the mechanical energy required for industry, agriculture, transportation and communication should be apportioned in the light of our rich manpower, and the rate should be lower than those of English and America. Therefore, we must adopt active measures of energy conservation in order to raise our general energy efficiency.

The rise of energy technical efficiency is related to the principal types of energy used, and the use of the principal energy resources is closely related to power machinery and equipment. The improvement of power machinery and equipment plays the role of a lever on the large-scale use of the principal energy resources and the raising of energy technical efficiency. Coal, petroleum, hydropower, solar energy and so forth have been used for a very long time in human history, and it was not until the invention of the steam boiler that coal was extensively used as an energy resource. Similarly, petroleum and hydropower had its significance as modern energy resources only after the invention of internal combustion engines and hydroturbines. Until power generating equipment for solar energy is ready, its large-scale use would be impractical.

In the historical development of energy utilization, wood as the principal source of energy has been replaced by coal, which in turn has been replaced by petroleum and natural gas. In the same way, power machinery equipment has also undergone changes, from the replacement of animal strength by steam engines, and then the replacement of steam boilers by hydropower and wind force, internal combustion engines and electric power machines. The form of energy consumed in power driven machinery and equipment has also undergone new changes with the tendency of change from solid to liquid fuel, or from primary to secondary energy resources. With the exception of natural gas, the gasoline, diesel oil, gas and electricity used in large quantities by internal combustion engines and power driven engines at present are no longer natural primary energy resources, but secondary energy resources after processing.

The use of new energy resources and power driven machinery and equipment has shown marked success in raising the technical efficiency in the use of energy. For example, the use of modern central heating with natural gas in place of heating with open hearth by burning firewood can raise the heat efficiency of energy from 8 percent to 60 percent. For producing the same amount of mechanical energy, the use of gas burning internal combustion engine instead of coal burning steam boiler can reduce the fuel by four-fifths. The efficiency of diesel oil burning locomotives is generally 5.8 times that of coal burning steam locomotives. In factories, the efficiency of power-driven machines is on the average higher than that of steam boilers. The average efficiency of steam boilers is 15 percent, and approximately one half of the mechanical energy is lost in the conveyor belt system. In some cases, the efficiency of mechanical energy is less than 10 percent, while the generating capacity of some large modern utility power stations is as high as 40 percent. If a machine-tool is equipped with power driven machines, the efficiency of power transmission from the transformation center to the machine-tool is 70-90 percent, and the effective efficiency of mechanical energy can be as high as 28-30 percent. Since the efficiency of internal combustion engines and power-driven engines have higher efficiency than steam boilers, the use of boilers has been extensively replaced by the use of internal combustion engines, in transportation and communications circles, and by power-driven machinery in factories.

The period required for the replacement of the principal energy resources depends on the amount of natural energy resources possessed by the country concerned. England was relatively rich in coal, and after the industrial revolution, coal has maintained its dominant position in energy resources for more than a century. In the 1950's, the large scale importation of low-price oil gradually brought about the replacement of coal by oil and natural gas. America is quite rich in various energy resources, and the time required for the replacement of firewood by coal, and the replacement of coal by petroleum and natural gas was about 50-60 years.

It usually takes 30-40 years for a power-driven machine from the time it is first used to attain its dominant position. It will be much longer if the time for its research and manufacture is taken into account. Therefore, the supply of energy required must be guaranteed, or it may cause serious losses to the national economy. Furthermore, the replacement of one type of energy by another cannot be completed in a short period. The system of internal combustion power system built up in America, Japan, and some West European countries on the foundation of imported oil and the resultant predicament should be a good lesson for us.

The world is now in a stage of transition from the use of petroleum and natural gas to some new principal energy resources. The drastic increase of oil prices in 1973 has led to a gradual decline of the ratio of petroleum and natural gas and an upswing of coal in the makeup of energy consumption. Atomic energy is also being gradually developed. Judging from the present energy reserve in the world and the development of science and technology, and from the shortage of oil and gas (although the resource of coal is a little more), we can see that the traditional energy resources will be insufficient for the daily growing needs of national economic development in the next several decades. In the future makeup of energy consumption, the ratio of oil and gas will be further lowered, and there will be an upswing for coal, although it can never return to the same dominant position it occupied before. Hydro-resources are limited. In economically developed countries, most of the hydro-resources which can be profitably exploited have already been exploited and whatever is left can be of only local, instead of worldwide, significance. Atomic energy is a promising resource. The technology of atomic energy is now one of the three major technologies under intensive research in the world. Along with the development of scientific and technological research, there will be a gradual increase of atomic energy resources for utilization. The utilization rate of natural uranium by the atomic energy power stations now in operation is less than 1 percent. However, if the research and manufacture of fast neutron breeders are successful, the utilization rate of natural uranium can be raised to more than 60 percent. The gas cooled thermal reactor too can make use of thorium which is plentiful in nature, and once the technical problems for controlled thermo-nuclear fusion breeders are solved, people will have abundant resources from sea water. In the distant future, atomic energy will replace petroleum and natural gas and become the principal resource in the energy system.



The change of the principal energy in the energy system will bring about new changes in the forms of energy directly used by power-driven machinery. Electric power is easy to use, highly efficient, clean, and more flexible than other forms of energy. Many primary energy resources can be converted into electric energy, which in turn can be converted into thermo-energy, mechanical energy, photoenergy and hydrogen energy. Atomic energy, hydropower, solar energy and a part of coal can be converted into electric energy to be supplied to the consumers. The ratio of primary energy resources to be converted into electric energy will be speedily raised, and electric-power driven machinery and equipment will occupy a much more important position in the entire system of power-driven machinery. The gasoline and diesel oil directly used in internal combustion engines, apart from continued extraction from petroleum, can also be obtained from coal, oil shale, tar sand and other solid fuel as important supplements, but all of these have still to rely on mineral fuels. The extraction of hydrogen energy from hydropower resources may be a reliable way to solve the problem of fuel for internal combustion engines in the next century. The production of hydrogen in combination with the operation of atomic energy power stations and the megathermal decomposition of water within a nuclear reactor can raise the utilization rate of nuclear energy. It is also possible to adopt the method of load regulation, or to use the idle generating capacity, separated from the peak load, to produce hydrogen from water with electrolysis, to be used as fuel for internal combustion engines and to increase the utilization rate of the equipment in power stations. The intermittent and unstable operation of solar energy power stations can also be regulated by the use of hydrogen as a form of stored electric energy. More power will be generated when there is bright sunshine, and the extra electric energy can be converted into hydrogen energy; at night or during cloudy and rainy days, the hydrogen energy can be converted into electric energy again. Both electric energy and hydrogen energy are secondary energy resources converted from primary energy, and they can interchange. As long as atomic energy and the other new energy resources will be come principal energy resources of the future, there will be a reliable guarantee of primary energy resources for the production of hydrogen energy. Once hydrogen energy becomes the principal fuel for internal combustion engines, the structure of internal combustion engines will have to change to suit the features of hydrogen energy.

In setting up a system of power-driven machinery, we must consider the economic as well as the energy resource conditions of each locality. Animal power, natural power, steam power, internal combustion engine power and electric power may coexist for a considerably long time. To meet the requirements of the four modernizations, it is necessary to develop high efficiency internal combustion engines and power-driven machinery and equipment in coordination with the special features of our energy resources. We have rich coal and hydropower resources, and our oil resource is also quite promising. Coal is mainly distributed in the north, while hydropower is mostly in the southwest. In the north, electric power industry should



be developed in combination with the comprehensive use of coal, and, if conditions permit, large pit head power generating stations should be built in the coal bases, and the transportation of coal will be replaced by the transmission of electricity. The regions with rich hydropower facilities in combination with the development of local industry, agriculture and water transportation. We should have some long-range plans in setting up our energy policy and for the development of the power machinery. We should stress the development of power machinery equipment, and in manufacturing internal combustion engines, we should consider the special features of the required fuel. The required scientific research and trial manufacture should be planned well in advance instead of being carried out later on the spur of the moment.

### III. The Trend of Changes in Energy Consumption Coefficient

Changes in the structure of the national economic departments and the improvement of power machinery equipment and production techniques are the two essential factors affecting the consumption of energy in our national economy. The constant replacements of power machinery equipment in history indicates the transition of social productive forces from the age of steam power to that of electric power, and now the dawn of the atomic age. There cannot be any clearcut separation between the effects of the two factors on the amount of energy consumption in the national economy. These two and some other factors are intermingled to form a very complex makeup of energy consumption. In a certain historical period, there are factors requiring expanded energy resources and factors requiring energy conservation. The growth and decline of these factors form the relationship between energy consumption and national economic development in a certain period.

In studying the relationship between energy consumption and national economic development, we usually use indexes of the amount of energy consumption and of the total national economic output for comparison. Since there are too many types of energy and social products, the units to be used for calculation cannot be identical. The production units using a single energy source to produce a single type of product can directly use the indexes of material objects for comparison. If a unit uses many different energy resources to produce a single type of product, then the various indexes of energy consumed should be reduced to the amount of caloric value to serve as unified units to be used for comparison with the output of products. However, a production department may use many different energy resources to produce different types of products. In comparing the total energy consumption with the total output in the national economy, we should, in addition to reducing various resources to their value in unified units, calculate the various products making up the total output at certain comparable prices and then work out the total output value before we can carry out a comprehensive analysis within the scope of the national economy. The comprehensive analysis of total energy consumption and the total output value in the national economy must be coordinated with the individual analysis by various individual material production departments before we can

actually understand the economic efficiency in the use of energy for the national economy. To achieve this goal, we must possess a large amount of reliable historical data concerning this area, and this is a complex basic task.

The coefficient of energy consumption and the amount of energy consumption on a certain unit of output value are the indexes to reflect the relationship between energy consumption and the total output value. The index of our total national economic output refers to the output value of the material production sector in the national economy within a certain period, and the scope of calculation includes agriculture, industry, economic activities in the construction trade, and other activities in the sphere of circulation, such as transportation, storage and packing. However, this does not include the income of the service trade which does not create new value. Therefore, the index of energy consumption to be used for comparison with the total output value should be the index of productive energy consumption. If nonproductive energy consumption is included in the total energy consumption index, it will certainly affect the reliability of the numerical data. The greater is the amount of nonproductive energy consumption included in the total energy consumption, the greater will be the likelihood of unreliability. In using foreign data, we must be careful to note the difference between their scope of calculation and ours. The index of energy consumption used by the western capitalist countries for comparison with the total output value includes both productive and nonproductive energy consumption, while in calculating the total output value, both the value of goods produced and the income of a service nature are included. Obviously, when there are different means of the indexes and different scopes of calculation, and there is no comparable figures, comparison of the results is out of the question.

From 1953 to 1978, our energy consumption was faster than the growth of our national economy, and the coefficient of average annual energy consumption was 1.25.\* It was 1.54 during the first five-year plan; 18.8 during the second five-year plan, 0.32 during the time of national economic readjustment (1962-1966); 1.25 during the Great Cultural Revolution (1966-1976) and 0.81 during the period of recovery after the downfall of the "gang of four." From this, it is not difficult to see the large difference between these coefficient, particularly during the two periods in the 10 years after 1958, as shown by the sharp rise and fall, which is obviously abnormal. This shows the serious imbalance among agricultural and light and heavy industries in the national economic structure and the great waste of energy resources.

How will the coefficient of energy consumption change in the next 20 years? Will it rise or decline? This concerns the problem of arranging the ratio between the speed of development of energy resources and the speed of our national economic growth. These questions are hard to answer since our historical experiences have not been properly summed up and it is hard to

predict the future. Here, we can only analyze the trend of possible changes in the structure of the national economic departments and in the technical efficiency of energy utilization.

At present, our country is undergoing a national economic readjustment. After more than 1 year's readjustment, the tendency toward stressing industry and neglecting agriculture and highly regarding heavy industry and slighting light industry has been changed, and the change in the structure of our national economic departments will be along the line of agriculture and light and textile industries. In this case, the ratio of energy consumption to output value will further decline. Furthermore, while the supply of energy is inadequate for the demand and there is serious waste of energy resources in our national economy, vigorous policies and measures for energy conservation will certainly lower the energy consumption coefficient during the period of readjustment.

After the period of readjustment, the national economy will develop to the stage of large-scale construction of the four modernizations. Agriculture, light industry and textile industry, after readjustment, will develop rapidly to help in the development of heavy industry, but heavy industry too must be further developed in order to equip agriculture, light industry, transportation and communications, and heavy industry itself with advanced technological knowhow and to enable the national economy to develop rapidly in a planned and proportionate way. By that time, heavy industry will once again return to its former leading position in the structure of national economy. This is one of the factors affecting the coefficient of energy consumption. Now let us again look at the prospect of adopting advanced technology as a means of raising the efficiency of energy utilization. Our country's economic foundation is weak; the population is large; the majority of enterprises are of small and medium sizes; and their equipment for production is quite backward. If we attempt to carry out technical transformation for all these small and medium-size enterprises and to raise the technical efficiency of energy utilization and labor productivity throughout the society with remarkable success, we must consider the development of the social productive forces as a whole which cannot be successful without the development of heavy industry. This task cannot be accomplished in a short period. Therefore, during the period of large-scale construction of the four modernizations, the coefficient of energy consumption should be larger than one. However, a specific coefficient must be studied in the light of specific conditions and cannot be based on the coefficients of some economically developed countries during their industrialization or the coefficients of some Third World countries; otherwise, the same situation of tight energy supply will continue with the overstocking of equipment for producing energy as the only alternative. This is harmful to our four modernizations.

#### FOOTNOTES

\* The amount of energy consumed does not include the plant fuel used by people in the countryside. Since it is impossible to distinguish between

the figures of productive and nonproductive energy consumption, the index of total energy consumption is being used here for expediency. According to estimates, in the early period of the first five-year plan, the percentage of civilian consumption amounted to 43 percent of the total energy consumption; in 1978, it was 16 percent. Based on these figures and discounting the civilian consumption, the coefficient of energy consumption should be 1.45.

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CSO: 4006

## ECONOMIC PLANNING

### RELATIVE IMPORTANCE OF PROPORTIONS, PLANNING, SPEED DESCRIBED

Beijing JINGJI YANJIU [ECONOMIC RESEARCH] in Chinese No 6, 20 Jun 80  
pp 12-18

[Article by Wang Mengkui [3769 1125 1145]: "Proportions, Planning and Speed"]

1. Proportionality is an objective demand in the development of socialist production. In any mode of production, certain proportion must be maintained among various factors of social production, among different departments of production and among different links in reproduction. Once this proportionate relationship is disrupted, the entire process of social production will not be able to proceed normally.

Proportionate distribution of social labor is a necessity as long as there is a social division of work. The more advanced are science and technology; the more meticulous is the social division of work; and the more socialized is production, the stronger will be the interreliance and interrestrictions among various production departments and various links in social reproduction, and the greater will be the need for proportionality as an innate force and condition for developing production.

Marx said: "The volume of products corresponding to the different needs require different and quantitatively determined amounts of the total labor of society. That this necessity of the distribution of social labor in definite proportions cannot possibly be done away with by a particular form of social production, but can only change the mode of its appearance, is self-evident. Natural laws cannot be abolished at all. What can change in historically different circumstances is only the form in which these laws assert themselves."<sup>1</sup> The "distribution of social labor in definite proportions" referred to here includes both living labor and materialized labor; and the "total labor of society" also refers to the total amount of living and materialized labor.

Natural economy means self-sufficient economy. Under the conditions of natural economy, the society was formed of many isolated economic units (such as primitive village communes, peasant families under the patriarchal clan system, fiefs and so forth). In each of these economic units, it was



also necessary to distribute labor in proportion in order to meet the requirements of their production and livelihood. In "Das Kapital," Marx once described how necessity had forced Robinson in an uninhabited island to apportion his working time each day. Of course, under the conditions of natural economy, which was commensurate with undeveloped productive forces, the distribution of labor in proportion was in direct response to the sense organs and was primeval: production and livelihood was then in their simplest forms and at the lowest level.

The exchange of commodities dates back to the late period of the primitive society. However, throughout the long course of history, the exchange of commodities existed and developed as a supplement to natural economy; and was not highly developed until the age of the capitalist society. Then it became the dominant form of social economy. The birth and development of large scale machinery industry gave a strong impetus to the social division of work and to the rapid increase of the numbers of departments and spheres of production. The tendency of the development is that the production of not only each type of product, but also each part of a product and even each part of the work process will become an independent production department. The continual classification of production process is based on the quality as well as quantities in proportions. Capitalist production is socialized production, and a definite proportional relationship objectively exists. However, because of private ownership and anarchy, the proportionality of social productions is realized through the spontaneous regulation of the law of value. It even has to rely on the disruptions of periodic economic crises to force a return to balance as a temporary readjustment of the proportionate relationship. This inevitably created great waste of social labor. Among the capitalist enterprises, production is planned, and along with the progress of science and technology and the development of the productive forces from the stage of individual enterprises to that of monopoly organizations and then transnational corporations, the scope of planning has also gradually expanded. Even among the rival monopoly organizations, certain forms of agreement may be reached in planning under certain conditions, and in certain economic departments of a country, the plans of certain characteristics may to some extent consciously adjust the proportionate relationship. Since these plans are based on the study and forecast of market demands, and readjustments are carried out according to changes of the market conditions, rash action is reduced to a certain extent. This shows that the development of productive forces have forced even the bourgeoisie to treat privately own productive forces as social productive forces within the framework of capitalist relations. However, under the system of capitalist private ownership, it is after all impossible to make conscious proportionate arrangements for the entire social economy.

Under conditions of socialism, however, the proportionate development of production is of even greater significance. The reason is that on the one hand, the proletarian state controls the lifeline of the national economy and shoulders the important historical responsibility of organizing

social production and people's way of living. At the same time, the establishment of the public ownership system leads to the organization of the entire economy into a complex organic body, and unless there is a conscious effort to maintain a proportionate relationship between the needs for social production and reproduction, normal social economy life will be difficult and, worse still, there will be disruptions and crises more serious than those of capitalism. As Marx aptly put it: "Society likewise has to distribute its time in a purposeful way, in order to achieve a production adequate to its overall needs, just as the individual has to distribute his time correctly in order to achieve knowledge in proper proportions or in order to satisfy the various demands on his activity. Thus, economy of time, along with the planned distribution of labor time among the various branches of production, remains the first economic law on the basis of communal production. It becomes law, there, to an even higher degree."<sup>2</sup> The superiority of the socialist system is manifested in the organization of social economic activities in proportion to the needs for reproduction through conscious planning.

However, when the productive forces have not yet been highly developed in the present stage of socialism, it is still impractical for the means of production to be exclusively owned by the society; so commodity production and commodity exchange still exist, and it is impossible to plan the regulation of the proportionate relationship of the entire social economy. After the October Revolution, Lenin made these succinct remarks about the current situation in Russia: "As far as we are concerned, complete, all-embracing, and real plans mean 'bureaucratic fantasy'"<sup>3</sup> Our present productive days, are generally speaking, still backward. Experiences at home and abroad have proved that with backward productive forces, a sporadic economy, a backward culture, and the lack of advanced communications and computing equipment--which enable us to quickly and accurately master the statistical data required for the formulation of plans--under the conditions of a coexistence of state economy, collective economy and certain individual economy in the system of ownership, it would be difficult to work out a comprehensive and unified plan embracing all the economic activities at all levels from the central to the local governments, including every department and every production unit, and affecting the production, distribution, exchange and consumption of hundreds of millions of people. Such a plan, if made under compulsion, will not help in the proportionate development of the national economy. In view of the experiences over the past decades, people must consider this problem afresh in order to explore some avenue for restructuring the economic system, developing commodity production, applying the law of value and combining planned regulation with market regulation in order that our national economy can develop more proportionately.

11. Socialist economy is planned economy, and the basic task for planning is to strive for an overall economy. The so-called overall balance means proper ratios between different production departments and between various production departments (either in terms of value or in the form of material objects) is a prerequisite for the smooth progress of reproduction. Way

back in 1957, Comrade Chen Yun strongly pointed out the need to attach importance to the study of the proportionate relationships of national economy, and to maintain a constant balance in the state budget, in bank credit, in the supply and demand of materials, and an overall balance among all these balances. Our experiences in 30 years of economic construction, both successful and unsuccessful, have time and again proved that the principles advanced by Comrade Chen Yun are entirely correct and should be our guidance in planning.

The proportionate relationships in national economy can be observed from different angles, such as:

From the way products are used, we can classify them into two major categories, namely, the means of production and the consumer goods. This classification is the basis of Marxist theories of reproduction. To be proportionate means first the correct handling of the proportionate relationship between these two major categories. This is the most general classification of material production. In actual economic life, people again classify them according to their characteristics, into products of different departments, such as industrial, agricultural, communications and transportation departments. Among these departments and within each department, there are still a series of complex relationships.

From the way national income is distributed, there is the ratio between accumulation and consumption. In the makeup of the accumulation fund, there is the ratio between productive accumulation and nonproductive accumulation, or, as we can say, the ratio between state construction and the people's livelihood, and this ratio is restricted by the ratio between the two major categories. For the vast majority of products, their use value determines the way they are used, for either production and construction or for consumption in daily life.

The proportionate relationships between various national economic departments demand a proper allocation of manpower (including skilled workers and technical cadres), materials (including the means of production and consumer goods) and money (the expression of commodity value) in order to achieve the balances in and between manpower, materials, and money. In other words, there should be a proper ratio between them.

Today, when international economic and technological contacts are becoming increasingly frequent, and our export trade is becoming an increasingly important factor in our national economy, to maintain a suitable ratio between our import and export in order to realize a balance of foreign exchange is of great significance to the harmonious development of the economy. For importing equipment as well as for foreign loans, we must consider our ability to repay and to produce the auxiliary parts in addition to our technological strength. It would be very dangerous for an adverse balance of foreign exchange to last for a long time. According to the

limits internationally recognized, the total amount of repayment of the principal with interest cannot exceed the total amount of foreign exchange derived from exports by 20-25 percent. This ratio seems satisfactory for our present actual conditions.

Judging from the entire process of social reproduction, we can see certain ratios among the links of production, distribution exchange and consumption. Besides, there are still the ratios between economic growth and population growth; between economic growth and the development of science, culture, education and so forth.

Lenin said: "A constantly and consciously maintained balance actually means planning."<sup>4</sup> Balance means being proportionate. For all projects undertaken at all levels from the entire national economy down to each department, the objective ratios should be carefully explored in order that there can be a balanced development. Balance should be the basic principle in planning and in all economic work. The superiority of a planned economy is not derived from the establishment of our planning organization or from the plans worked out by this organization for economic development. The superiority lies in the ability of the planning organization to work out an overall balance for the entire national economy in order that the plan will correspond with the various proportionate relationships in social production. Without an overall balance, planned economy can exist on paper only. We may say that our ability to work out an overall balance and thus help the proportionate development of the national economy is a basic indication of success in planning and planned economy.

On the question of overall balance, there has long been a controversy over "long line balance," meaning, a balance based on the maximum amount of material (or the so-called "long-line" products, meaning goods in full or excessive supply). Sometimes, the so-called "maximum" is only an assumed, or an unreal figure. In this way, even a planned "balance" in appearance still leaves many gaps. This type of "long-line balance" was once said to be a "positive balance" and some people even claimed that "gaps means a driving force," which could serve as an impetus for the products in short supply to catch up in production. In fact, gaps are a negation of balance. With the exception of the first five-year plan, the first readjustment in the 1960's, and the readjustment which began in 1979, planning has been carried out in this way for many years. As a result, the "positive balance" did not produce any miracle at all. On the contrary, the imbalance became increasingly serious. Sometimes, we filled these gaps with the expedience of "eating dinner at lunch time" or "skin-grafting," but there was always a serious imbalance behind the false appearance of a balance. Practice has proved that the so-called "positive balance" is entirely passive in nature, and should never be tried again.

The so-called "short-line balance" certainly does not mean that people can simply work out a balance based on the minimum amount of materials.



In other words, we have to calculate carefully in determining what is long-line and what is short-line and then try every possible way to increase the production of what is in short supply in addition to the utilization of the goods in stock and then dependable importation. After all these efforts, we will do whatever we are able to do. As to goods in full or excessive supply, elaborate arrangements are also necessary including arrangements for export, for reduced production and changing the line of production in order to supply more short-line goods. This scientific way of achieving overall balance has been derogated as "passive balance" and even ridiculed as "rightist opportunism." In fact, we must work out the short-line balance as mentioned above before we can achieve an overall balance. A really positive balance should be able to bring about a proportionate development. There is no doubt that we should uphold the "short-line balance."

Of course, ratios are by no means immediate. They can change along with the change of economic and technological conditions. In the complex ratios of the national economy, there are roughly two types of ratios which are of different characters and are yet interrelated. The first type can be called technological-economic ratio. For example, the amount of steel required in manufacturing a lathe, and the amount of coke required for producing 1 ton of iron, and so forth, vary according to technological process. However, under a certain technological condition, this type of ratio is expressed in strictly definite amounts. The second type can be called the ratio of social economy, such as the ratio between the two major categories, the ratio between accumulation and consumption, and so forth. There is a certain margin for the variation of ratios thus providing some leeway for people to take their choice from alternative plans after comparison. However, the margin of variation is limited in quantity, and any variation beyond this margin will result in imbalance. This quantitative limit is what people usually called "lever." An important task in the study of economics is to look for this "lever" based on practical experiences and a scientific prediction after a meticulous quantitative analysis. The "lever" is used as a yardstick in working out economic plans.

All things in the world, national economy included, are in a constant state of motion and change, and imbalance can always appear. At the same time, all things in the world, national economy included again, are qualitatively stable under normal conditions and remain as a relatively static balance. The development of socialist economy is inseparable from balance, because development means balanced development and balance means balance in development. It should be admitted that while national economy constantly develops and the development in various departments is unbalanced, the ratio cannot be immutable. At the same time, it should also be admitted that balance is a condition for development as well as a form of development. As long as a balance is maintained, a proper ratio can be maintained, and social production will proceed normally. Because of the imbalance in development, the destruction of the old balance should be followed by the setting up of a new balance in order that economy can further develop.



In other words, in the constant changes during development, we have to look for and set up a new ratio in order that the national economy can continue to develop on the basis of the new balance.

Speaking of planning and balance, Comrade Mao Zedong said "A constant process of readjustment through state planning is needed to deal with the contradiction between production and the needs of society, which will long remain as an objective reality. Every year our country draws up an economic plan in order to establish a proper ratio between accumulation and consumption and achieve a balance between production and needs." "Sometimes, contradictions arise and the balance is upset because our subjective arrangements do not correspond to objective reality; this is what we call making a mistake. The ceaseless emergence and ceaseless resolution of contradictions is the dialectical law of the development of things."<sup>5</sup> Unfortunately, in actual economic work, this correct principle was not completely implemented. On the contrary, the philosophical concept that "imbalance is absolute and balance is relative" is directly and without any media applied to economic construction. Thus the significance of imbalance is one-sidedly stressed while the function of balance is negated with the mistaken idea that only imbalance can be positive, revolutionary, and capable of promoting economic development, while balance is passive, conservative, and obstructive to economic development. The negation of overall balance, of the proportionate development of national economy, and of the dialectical principle that there is absoluteness in relativity, is a metaphysical viewpoint. This ideological influence has serious consequences in practice.

III. The question of speed is an important one in socialist construction. However, speed should also be proportionate. We want high speed, but not for individual products or individual departments, but rather high speed for the entire national economy. If we say that under conditions of petty production with a sporadic economy and backward technology, individual products and individuals departments can still develop even without close relationship with other departments, then today when our national economy has become an indivisible entity because of the establishment of the public ownership and the development of science and technology, and when the process of large-scale socialized production is based on cooperation and division of work, no individual departments can develop quickly in isolation from other departments. If the proper ratio is upset, the speed of development for individual departments, though quite high for a while, eventually have to slow down. For example, in developing the steel industry, there should be not only proportionate developments in the links of production, such as mining, iron smelting and steel smelting, but also an intensive study on the proportionate relationships with other departments so that there can be corresponding developments in electric power, coke, nonferrous metal, communications and transportation, daily life facilities, commercial network and so forth. Any party failing to keep pace with the rest will cause a "chain reaction" which may jeopardize the normal development of iron and steel as well as other departments. "A single horse

taking the lead" can only upset the overall balance of national economy instead of bringing about the spectacle of "10,000 horses in full gallop." The result can only be jeopardy to "10,000 horses" caused by "one horse," and that "one horse" must eventually make a retreat. This was how, after 1958, the practice of "taking steel as the key link" and the resultant imbalance caused serious setbacks to our economic development. This is a painful lesson for us.

We must also note that the speed of our national economic development is calculated in terms of the total output value. Here lurks a possibility: If we disrupt the proportionate relationship of the national economy and bring about the lopsided development of a certain product or a certain department at the expense of other products and departments, then in the short run, the development may not be slow as shown by statistics. In the long run, however, because of the imbalance, the speed cannot be high. Furthermore, the "high speed" shown in statistics cannot accurately reflect the actual growth of the entire national economy. Such are the hard facts. According to statistics, from 1951 to 1977, the average annual rate of industrial growth in the world was 6.6 percent. The rate of the Soviet Union and some East European countries was 9.7 percent, that of the developing countries was 7.6 percent, and that of the developed capitalist countries was 4.9 percent. From 1949 to 1977, the average annual growth rate of our total industrial output value was 13.5 percent. From these figures, we can see that the speed of our development was quite high. However, our actual achievements in economic construction cannot keep pace with the speed of growth as shown by these statistics figures. There are many causes for this, but one of the main causes is undoubtedly the serious imbalance among various departments of the national economy.

In order that the development of our national economy can be proportionate and relatively fast, it is very important that we should be guided by our experience in economic construction in the past 30 years and correctly understand and handle the following relationships:

Target and Speed. In formulating economic plans, we certainly have to set the targets. However, planned targets are after something subjective, and a high target does not necessarily mean high speed. Whether a planned target can be actually accomplished and the extent of its success depends on one important factor, that is, whether the target reflects the proportionate relationship required for social reproduction. A plan can be practical and can promote the high speed economic development only when it conforms to objective realities, and the listed targets closely reflect the proportionate relationship of social reproduction. Therefore, in formulating plans, we must conduct in-depth study and investigations, meticulously compute various ratios, keep the overall situation in mind, seek truth from facts, and do only what is possible. There should not be any bragging and over-commitment at all. Planning is based on a forecast of the future, but in economic development, there is always some element which cannot be accurately predicted. This is particularly true in view of the fact that peasants form 80 percent of our population and that agriculture

still cannot be free from the effects of natural forces. Therefore, in planning, there must be some safety margin instead of a gap. In the past, we suffered a great deal from high targets because of the erroneous notion that "high targets stand for Marxism and low targets stands for rightist opportunism." When setbacks were encountered, we were forced to lower the targets; but as soon as the situation improved, impractically high targets were set again. These repeated errors seemed to have become a chronic disease. In order that our national economy can hereafter develop smoothly, we must first of all eradicate this chronic disease and eliminate all bragging, empty talks, deceptive talks and various types of formalism which disregard economic effects. We must also stamp out the practice of setting impractically high targets, and formulate our 10-year plans, five-year plans and annual plans on a realistic and scientific basis.

**Accumulation and speed.** For a high-speed development of our national economy, we must carry out expanded reproduction. Accumulation is the source of expanded reproduction, but excessive accumulation cannot produce high speed. Quite the contrary, when the rational limit is exceeded, higher accumulation will result in lower speed, as proved in our experiences in the past 30 years. Accumulation can promote economic development only when it fits in with the overall balance. Within a set period (say 1 year), the total national income is fixed. Excessive accumulation will seriously affect the people's living conditions, dampen labor enthusiasm, and inevitably hinder economic development. On the other hand, if the gradual improvement of the people's living conditions is insured on the basis of developed production, the accumulation rate should be suitably lowered. For example, in our country at present, accumulation has been reduced to a steady rate of about 25 percent. Actually economic development with this accumulation rate will be faster instead of slower, because when the masses are enthusiastic, they can create more wealth and provide more accumulation. This is beneficial economically as well as politically. During our first five-year plan, the accumulation rate was maintained at about 25 percent, and the various ratios were fairly harmonious. Economic development was rapid and the people's living conditions showed marked improvement. However, in the years of "Great Leap Forward" beginning in 1958, the average accumulation rate rose to 39.3 percent. In 1959, it was as high as 43.8 percent. This had serious effects on economic development and the people's living conditions. From 1970 to 1978, the average accumulation rate was 33 percent, and in 1978, it was 36 percent. Yet economic development did not show any added speed, while more and more projects for improving the people's livelihood were in arrear. This created a serious social problem. A careful study of our experiences, both positive and negative, and the determination on a suitable accumulation rate for the future are of great significance on the smooth progress of our modernization drive.

**The scope of capital construction and speed.** For the continued expansion of our social reproduction, capital construction should be carried out, of course. Yet the expanded scope of capital construction does not mean expanded reproduction or high speed economic development. If anything goes wrong, the reverse will be the result. For many years, the passive

situation of our economic construction was, to a certain extent, attributed to an over-extended capital construction front. This problem has still not been completely solved, and this is one of the causes of the need for readjustment. According to statistics after a general survey in 1978, it will take 4 or 5 more years to complete and commission all the projects now under construction in our country, even though no new projects will be added hereafter. Blind extension of the capital construction front has not only led to the neglect of the existing facilities for production, for people's livelihood, for culture, education, and so forth, but also disrupted normal social economic life. Even the capital construction itself cannot yield many economic benefits because the shortage of resources usually left the projects not fully completed. During the first five-year plan, the rate of commissioned projects was 43 percent, and the newly added fixed assets accounted for 83.7 percent of the total investment. In the second five-year plan, because of the one-sided stress on speed, the impulsive action taken and the lack of advance work, the rate of commissioned projects was only 20.1 percent, less than one half of that of the first five-year plan. In the 11 years of the Great Cultural Revolution, the rate of commissioned projects and the ratio of newly added fixed assets to the total investments dropped to 30 percent and 60 percent respectively. It is obvious that the returns from investments markedly decreased. Furthermore even the completed and commissioned projects cannot always start work normally because of the lack of an overall balance beforehand and the shortage of raw materials or fuel. Way back in 1957 Comrade Chen Yun strongly pointed out that the scope of construction should be consistent with the financial and material resources of the state. Consistency or inconsistency accounts for the difference between stable and unstable economy. Therefore, he held that we should look for some regulative measures to prevent the danger of the scope of capital construction being excessive to state capability. Comrade Chen Yun's opinion was entirely correct. Today, when the focus of work is being shifted to modernization, and many things are waiting to be done, people hope for quick action. However, we must not fail to draw our lessons from history and be careful in guarding against this danger. Therefore, it is very important that we should, based on our experiences in the past 30 years, find a suitable ratio of capital construction investments to financial outlay, be sure to advance realistically and steadily, and avoid large-scale rises and falls. In accomplishing modernization, the establishment of new enterprises is certainly necessary. However, we must first attend to the tapping of potentials of the existing enterprises, and renovate and transform their equipment. The foundation of the existing enterprises is quite firm. On this foundation, we can expand production capacity and speed up their economic development by importing the required new technology, by making up the shortage, or by transforming and improving them. For the capital construction projects which must be carried out, we must plan carefully and do only what is possible after working out an overall balance. For those projects requiring heavy investments, producing slow results and calling for long construction periods, we must be extra cautious in avoiding over-commitment and in preventing rash action.



Quality<sup>6</sup> and speed. The proportionate relationships between various departments of the national economy are stipulated by the plan in terms of quantities, and these quantities are based on certain qualities. For example, in the production targets for a certain amount of steel and a certain number of lathes, the steel and lathes are not just any steel or any lathes, because they must conform to certain varieties and specifications. Also for every specification, some specific quality is required. If the quality of a certain product is so poor that there will be discounted use value or no use value at all, its proportionate relationship with other products will be disrupted and the development of national economy will lose its balance. Then the waste from over-stocking by the production departments and the shortage of supply for the consumption departments will be like Siamese twins. Greater quantity and higher speed can then only mean more waste and less benefits for the society. Goods produced with wrong specifications can also cause great harm. Real speed must be accompanied by good quality, and large-scale modernized production cannot rely on over-straining our production capacity. We must raise our quality first and then strive for increased production, for economy and for high speed. Quantity and quality form a dialectical unity. For a long time, however, this dialectical relationship has been ripped apart by metaphysics. The one-sided stress on quantity at the expense of quality has brought serious consequences. If the quality of products are not up to the required standard, the utility of several of them cannot match that of one of good quality. The rejects are worthless, no matter how many there are; worse still, they mean a waste of manpower and material and financial resources. We must completely eliminate this backward practice, overcome the tendency toward striving for quantity for our products, economic results and the harmonious proportionate relationship as matters of prime importance.

In 1979, the Party Central Committee introduced a policy for readjusting our national economy, with the readjustment of ratios in the national economy as the central issue. The serious imbalance had been caused by the long practice of "taking steel as the key link," setting high targets, blindly expanding the scope of capital construction, and the irrational structure of economic management. The perverse action of Lin Biao and the "gang of four" made things even worse. After smashing the "gang of four," we are still not fully aware of the seriousness of an imbalance, and were rather hasty in our economic development. Thus the steps we took in our work were not steady enough with the result that new problems cropped up before the old ones were all solved. In the past year and more, the work of readjustment has been quite successful. However, the serious imbalance which has existed for a long time cannot be readjusted in 1 or 2, or even 3 years. Probably a longer period will be required. We must fully recognize the dialectical relationship between the proportions, planning and speed, unswervingly implement the correct policy of the Party Central Committee of readjustment of our national economic management in order that our socialist economic construction will develop in a healthy manner and reach the expected lofty goal. (March 1980)



#### FOOTNOTES

1. Marx, "To Kugelmann, (11 July 1968)" "Selected Works of Marx and Engels" Vol 4, p 368.
2. Marx, "Grundrisse" "Collected Works of Marx and Engels" Vol 46, P 1, p 120.
3. Lenin, "To G. M. Krzhizhanovsky" "Collected Works of Lenin" Vol 35, p 473.
4. Lenin, "Uncritical Criticism" "Collected Works of Lenin" Vol 3, p 566.
5. Mao Zedong, "On the Correct Handling of Contradiction Among the People" "Selected Works of Mao Zedong" Vol 5, p 375.
6. Strictly speaking, "ziliang [quality]" as a concept is incorrect. There are both quality and quantity for products. "Liang" refers to the quantity, while "Zi" refers to the special character of the product's use value, such as its chemical and physical properties (strength, hardness, precision, durability, weight, measurement, shape, color and so forth). In this and other articles, the author has used the term "Ziliang" for quality because of its popular usage. Strictly speaking, "Pinzi" seems more appropriate for this purpose. Of course, "Zi" can be expressed in quantity too (such as the degree of precision or the degrees of confusion expressed in numbers). However "Ziliang" meaning the quantity or degree of quality is different from "Ziliang" in daily usage.

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## ECONOMIC PLANNING

### SELLING MACHINERY, POWER INDUSTRIAL PRODUCTS IN OPEN MARKET HAS GOOD EFFECTS

Beijinh JINGJI YANJIU [ECONOMIC RESEARCH] in Chinese No 6, 20 Jun 80  
pp 19-25

[Article by Yu Zuyao [0060 4371 1031] of Economic Research Institute of Chinese Academy of Sciences: "After Machinery and Power Industrial Products Have Been Put on the Market"]

[Text] After emancipating their minds and breaking away from the shackles imposed by the idea that the means of production are not commodities, enterprises under the First Ministry of Machine Building have boldly entered the market. Their action has aroused great interest. In 1979, although state assignments were greatly reduced, and the supply of electric power, fuel and raw and semi-finished materials was tight, their total output value, profits and labor productivity were all above the highest levels in history. This was a miracle. Their experiences have shown that full attention to the regulative role of the market, under the guidance of state planning, and the combination of planned regulation and market regulation are, rather than an expedience, the key to an enlivened economy as well as the basic principle for economic restructuring.

#### Oriented to the Market By Broadening the Avenues of Production

For a long time, the machinery and power industry has mainly served capital construction and heavy industry. Since the adoption of market regulation, the scope of service provided by the machinery and power industry has been enlarged, and the readjustment and restructuring of this industry has also been accelerated.

1. Oriented to light industry and serving to speed up the development of light industry.

Light industry is a weak link in our national economy. Through the regulative role of the market, the machinery and power industry has actively and positively kept light industry supplied with advanced equipment for the technical transformation of light industry. For more than 10 trades and professions of the textile, porcelain, fat and grease, foodstuff,

pharmaceutical, and glass industries, the machinery and power industry in Shanghai has successfully trial produced many types of small, automatically controlled and complete sets of equipment for testing temperature, pressure, liquid and the rate of flow of various parameters. The Nanjiang Machine-tool Plant of Sichuan has trial-manufactured a new type of cutter which was tried out by eight different wrist-watch factories for one year with the option to buy. These cutters were found to be satisfactory and all these factories bought them. Again, the Tianjin Machine-tool Company, after surveying the light and textile trades, discovered that rubber shoes were in great demand throughout the world. However, there were not enough plaster molding machines to meet the demand, and orders for them were lined up with delivery dates reaching 1982. This company took the initiative of producing these molding machines, and the shoe and hat manufacturers lauded this act of assistance as "sending charcoal on a snowy day."

2. Oriented to production and serving the renovation and transformation of old enterprises and particularly the small local industrial enterprises.

The existing enterprises are the bases for the progress of the four modernizations. Compared with capital construction, the renovation and transformation of old enterprises generally require less investments but produce quicker results. The depreciation funds for the present state-run enterprises amount to about 10 billion yuan annually, and this amount, added to various state allocations and bank loans will exceed 20 billion yuan. However, in the distribution of machinery and power products, the policy has always been "first, capital construction; second, production; and no chance for renovation or transformation." Thus the funds cannot be used to full advantage. Now, the machinery and power trade is leaving its door wide open to the old enterprises carrying out renovation and transformation, and can supply them with either single engines and complete sets of equipment, or the main engine with the component parts and accessories. The old enterprises are free to look things over before deciding on their choice, or "see the menu before the cooking." The machinery and power trade can supply ready made goods and trial produce new products.

Small industries are a vital new force on the industrial front, but their equipment is outdated; their technology, backward; their consumption of raw materials, high; and their losses, serious. The consolidation and transformation of small industries are an important task in implementing the "eight-character principle" [of readjustment, restructuring, consolidation and improvement]. In the past, small industries were usually left out in the distribution of machinery and power products. The use of market's regulative role has prepared the way for the solution of this problem. Last January, the Shanghai instrument and meters trade held a goods fair with the unique feature of offering "useful," "economical" and "efficient" and automatic control equipment in complete sets for small and medium-size enterprises.

3. Oriented to the countryside and serving agriculture, animal husbandry and fishery.

Machinery and power products are mostly distributed under a unified state plan. In the past, the requests from communes and production brigades were usually ignored. Now we deliver our services to their door steps. In Sichuan Province, more than 30 machinery and power equipment plants have strengthened their cooperation in producing and supplying complete sets of equipment to the small hydropower stations in the countryside, and signed contracts for the supply of more than 540 power generating sets to various parts of the country.

At present, our herding areas and fishing areas along the coast are in very urgent need of freezing equipment, and there is an appalling waste of farm and aquatic products. The Shanghai Refrigerator Plant oriented itself to production units below the county level, and produced many complete sets of freezing equipment for the aquatic and farm products. This year, the state assigned to this plant the task of producing only 139 sets, but the plant itself received orders for 650 sets.

4. Oriented to people's livelihood by developing the production of durable consumer goods.

The production of durable consumer goods is far from adequate to the needs in people's daily life, and yet the equipment of many machinery and power and equipment enterprises is left idle, because they were operating under capacity. Since the entry of the machinery and power industry into the market, the situation has begun to change. Some of these enterprises are now providing equipment for the production of durable consumer goods; some are producing component parts for durable consumer goods; and some have changed their lines of business and are now producing electric meters, refrigerators, laundry machines, electric fans and so forth.

5. Oriented to the world market and striving to improve the makeup of our export commodities.

Machinery and power products are in great demand in the world market and earns the largest portion of foreign currency in our foreign trade. However, our present export of machinery amounts to only 0.07 percent of the total volume of international machinery trade and about 2 percent of our total export. To develop foreign trade, we must change the backward makeup of our export products. There are great potentials in our machinery and power industry, because some of these products have already attained the technological level of the 1970's. In 1979, for instance, the Hangzhou Oxygen Manufacturing Machine Plant exported to West Germany the special technology for producing fins for the fin-type heat exchangers. This is an advanced technology for producing fine quality goods at low production costs. The Mindong Electric Machine Plant of Fujian Province has produced small power generating assemblies which sell well in 20 countries and

regions. They are attractive, durable, low-priced and fine products, and can surpass those of famous international brands. At present, some rich capitalist countries are in great demand of common machine tools. As long as we pay attention to quality, guarantee the supply of component parts and accessories as well as our technical service, and carry out active sales promotion, it is entirely possible to increase our sales.

After all, the entry of machinery and power products into the market and the change from pure reliance on state-set production plans to regulation by market demands in production have not only solved the problem of "feeding" the machinery and power industry, but also, more important still, promoted the readjustment and restructuring of the existing enterprises, and pointed out the direction for this industry to offer better services, that is, the change from mainly serving capital construction to mainly serving production and the renovation and transformation of existing enterprises; and from mainly serving heavy industry to serving light industry, agriculture and local industries at the same time; from purely manufacturing the means of production to the production of consumer goods; and from producing purely for the home market to producing for the world market as well. This is a turning point of great significance in the history of the development of our machinery industry. It has pointed out the direction for restructuring not only the machinery and power industry, but also the heavy industrial departments.

#### Competition Provides Enterprises Added Vitality

Since the entry of machinery and power products into the market, many enterprises have begun to compare quality and prices and tried to offer better services. All of them are now full of vitality.

In October 1979, Sichuan Province held a machinery and power products conference in Wenjiang for receiving orders. At first, the conference followed the old pattern: Only the catalogs were available for the prospective customers, but production and demand "fell in love at first sight" and the old pattern was discarded. To promote their own sales, every plant held goods fairs. At first, only small articles, such as electronic elements, ball bearings, standard parts, cutting tools and so forth were displayed. Later, lathes and vehicles appeared. There were also on-the-spot demonstrations, artistic posters and a dazzling array of exhibits. Separation between production and demand was now replaced by direct transactions; limited supply, replaced by abundant supply; and unified procurement and distribution replaced by selective purchases. All plants spontaneously started a heated competition in quality, prices, varieties, delivery dates, and services. People generally felt that this conference for receiving orders was a complete departure from the old convention, and was an incentive for the plants to compete among themselves in skill and work style.

In 1979, the Chongqing Refrigerator Plant of Sichuan Province was operating under capacity. After a market survey, it undertook the supply of



complete sets of cold storage equipment for various counties. At that time, the Shanghai No 1 Refrigerator Plant had already put up an advertisement in the newspapers offering the supply of refrigeration equipment. In view of this competition, the Chongqing Plant offered to design, to debug, to supply spare parts, to train technicians and to pay service visits to the buyer. Its guiding idea was: "If you offer good services, I am going to offer even better services." This resulted in a friendly emulation with both parties aiming high.

In the fall of 1978, the Kunming Drilling Machine Plant received an order from a foreign trader for a carving machine, operating at 12,500 RPM. The plant knew that in Hong Kong, West Germany products could cooperate up to 20,000 RPM. After vigorous efforts, it finally succeeded in producing carving machines of 20,000 RPM with even better quality. The foreign trader gladly bought 150 sets.

In the past, the enterprises were simply relying on the state and "eating out of the same pot." Now, they have the power to plan for and to sell their products according to market demands, and the consumers have the right to select and purchase what they want. With material benefits as the internal driving force and competition as an external stimulus, the enterprises are now in high spirit and their economic life is promising.

1. Eliminating the "bureaucratic-industry" and "bureaucratic commerce" work style, and fostering the business practice of serving the customers wholeheartedly.

Under the old system, the enterprise leadership was neither attentive to management inside nor care about business from outside. It formed the habit of relying, scrambling and waiting, namely relying on the state for "ready cooked meals," scrambling for manpower, money and materials, and waiting for customers to come. Monopoly in business, extra-economic restrictions in management, and equalitarianism in distribution were the main causes for the bureaucratic industry and bureaucratic commerce work styles.

Since the entry of enterprises into the market, the practice of "people requesting favors from me" has been changed to that of "my request for favors from people." In the past, the Hangzhou Oxygen Making Machine Plant had "four nonacceptance," namely, nonacceptance of anything not included in the plan, nonacceptance of anything not included in the catalogs, nonacceptance of orders for spare parts and accessories that is difficult to manufacture, and non acceptance of materials for processing. The customers found it "unapproachable and unreliable." Now the "four nonacceptances" have been replaced by "four unqualified acceptances." Many enterprises are even vying with one another in offering good services, and the "three guarantees" given to customers has been changed to one all-inclusive guarantee, which means the guarantee for repair, returned goods, replacement, transportation, installation and adjustments, technical training

and supply of spare parts and accessories. Instead of customers coming to the plants for help, the plants are now visiting the customers to offer services.

Since the plants were now given the power to organize their own production according to market demands, they have generally attached great importance to market surveys, and their economic work has become increasingly meticulous. The Dongxin Electric Carbon Plant of Sichuan have sent their people to as far as the oilfields in the Northeast and North China, to visit 16 electric trolley companies all over the country, and to inspect the mining bureaus in 18 provinces and municipalities. They set up files of the customers, ascertained the market conditions in Southeast Asia. The plant then organized its production accordingly, and in 1978, the output tripled the designed capacity. Thus "one plant became three plants" as people said. The leaders of many enterprises now feel that since there is no longer any "ready-cooked meals" for them, their responsibility has become larger, their burden heavier, and the jobs of plant directors and secretaries no longer easy.

What is particularly inspiring is that a number of capable entrepreneurs have emerged. They are enthusiastic about the four modernizations, have emancipated their minds, know their jobs well, and are practical hard workers. The Kunming Pneumatic Machinery Factory is a small one with only 600 workers, and assignments from the state was hopelessly inadequate. However, its leaders are good at the utilization of market regulation. In 1979, it not only operated at full capacity, but also increased its profits by 250 percent over 1978. Its policy of operation is summarized in four words: steady, meaning that in looking for business, the enterprise's capacity and orientation of development should be borne in mind; accurate, meaning that investigations on market conditions must be accurate; rapid, meaning the need for rapid action in carrying out standardization, general utilization and serialization; and good, meaning good quality and services.

## 2. Promoting overall economic accounting among enterprises.

The regulative role of market has given the enterprises an innate driving force for practicing overall economic accounting. The Chengdu Measuring and Cutting Tools Plant has adopted the system of three-level management and two-level accounting, and combined economic accounting with the systems of job responsibility and rewards and punishment. As a result, everyone bears in mind what they have to do, and is keen in accounting for their work. In 1979, the production cost for every 100 yuan's worth of output was down by 8.78 percent; the labor productivity of the entire personnel hit an all time high of 10,000 yuan; and the profits made exceeded the quota by 29.5 percent. In the past, additional manpower and equipment were required for increased-output; now output is increased despite reduced manpower and equipment. The plant has "pickled" 113 sets of equipment and has 500 person available for transfer to other organizations.

### 3. Accelerating technical innovation and the production of a new generation of goods for the enterprises.

It has been "the consistent system for decades" for the higher authorities to press for higher output value and the plants to produce it. The production capacity was excessive for general products, but insufficient for large, high precision and key products urgently needed by the state. The equipment produced was sometimes not enough to form a complete set, the varieties were small, and the quality poor. Now, with market playing its regulative role, the enterprises are forced to pay attention to varieties and quality. In one conference in Sichuan for receiving orders, 107 new products were added. In the face of competition from 250 other plants, the Shanghai Transformer Plant had to raise the quality of their products in popular demand in order to get more business, and undertook the supply of complete sets of equipment for electricity transformation stations. The motto of Yunnan Machinery Bureau is: Survive on good quality; develop through increased varieties; win reputation through good services, promote sales with reduced profits, and raise our level through export!

### 4. Giving greater scope to the economic and technical superiority of specialized plants and accelerating the reorganization of the machinery and power industry.

The present distribution of machinery and power industry, under both the central and the local authorities results in "large and all-inclusive" as well as "small and all-inclusive" units. This type of production structure runs counter to the trend of modern productive forces. The entry of machinery and power products into the market has broken down the barriers of natural economy with an irresistible force. A machine-tool repair station in Kunming formerly paid more attention to manufacturing than to maintenance and repairs, and had to change its line to the production of machine tools. But the quality was poor and the production cost was high; therefore, it was in no position to compete with the specialized plants. Finally, it returned to the former line of repairs and maintenance, and is now fully occupied. The No. 1 Shanghai Refrigerator Plant, after entering the market, was strongly competitive because of the fine quality of products, and the commercial departments, disregarding the official prohibitions, placed many orders with the Shanghai plant. In 1979, more than half of the orders received by this plant came from the commercial departments. The Shanghai light industrial system was in need of CG1107 automatic lathes, but for many years failed to get fully what it wanted. Therefore, it was forced to produce these lathes themselves. However, the quality turned out to be poor. The Ningjiang Machine-tool Plant of Sichuan, which specialized in this type of lathe, was always operating under capacity. In 1979, the Ningjiang Plant's entry into the Shanghai market was welcomed by the local light industrial system. In a single transaction, 500 sets were ordered.

After all, when transactions are carried out on equal terms and when there is direct contact between production and demand with freedom for the buyer

to choose what he wants, competition will be inevitable. Anyway, competition is better than a pool of stagnant water.

#### A Breakthrough in Economic Reform

The entry of machinery and power products into the market marked a breakthrough in the dogma that the means of production are not commodities, and smashed the pattern of economic management by a centralized authority. It also marks an important forward step in economic reform, because it proves the following:

1. Planned regulation must be oriented to the market, and be based on market demand and the trend of its changes.

Socialized production and the public ownership of the means of production demand that the distribution of social labor among different departments be regulated by planning. This is an important feature as well as the superiority of the socialist system.

In the past, the production of machinery and power products was under a unified plan handed down from above; in financial matters, all revenues and expenditures were handled by the state in a unified way; and the allocation of products and raw and semi-finished materials and the assignment of manpower were all under a unified system. The planned regulation based on centralized authority did not produce the expected result. Worse still it caused a dislocation between production and demand with the result that some products urgently needed for state construction and people's livelihood could not be produced, while unwanted goods flooded the market. On the one hand, plants were operating under capacity; on the other hand, construction was going on at full blast.

Planned regulation should be carried out through an overall balance so as to insure the steady and proportionate development of the national economy. However, the centralized planned regulation in the past led to repeated serious imbalances in the national economy as well as inside the machinery industry, resulting in "dispersed, chaotic and self-contained" structures. There are more than 30 different departments, and everyone of them, from the central authorities down to the communes and production brigades, has set up its own machinery industry.

Planned regulation should be able to correctly handle the interrelationship among the state (including the central and the local authorities), the enterprises and the workers through unified planning and overall management and by mobilizing all positive factors. However, the centralized planned regulation has given everyone an "iron rice bowl to eat out of the same pot," and tied the hands of the enterprises.

Planned regulation should be able to avoid the waste of social labor, and insure maximum economic results with the minimum expenditure of social

labor. However, the planned regulation was too rigid, and any mistake with the plan would cause tremendous waste of social labor.

Why so? The most basic reason is that since our productive forces are still backward, the public ownership of the means of production has not developed to the stage of ownership by the whole society and the labor of every producer has not developed into direct social labor. Furthermore, commodity production and commodity exchange not only extensively exist but should even be further developed. When commodity production and commodity exchange remain, social needs must be expressed through the market and the ability to pay. If production does not take market demand into account and certain commodity is produced in excess of social demand, nobody would buy this commodity, and the labor expended on it cannot be transformed into value, resulting in plain waste. Then the law of value will play its spontaneous role through pricing, supply and demand and other mechanisms to adjust the imbalance. However, centralized planned regulation not only fails to promptly and flexibly respond to the market signals or to permit the enterprises to readjust their production according to the market demand, but also basically negate and exclude the regulative role of the law of value. Therefore, as long as there is commodity production, planned regulation must correctly reflect the demand of the law of value, orient itself to the market, and use the regulative role of market mechanism to supplement, revise and examine itself.

## 2. Market regulation should be guided and incorporated into plans.

Market regulation is, in the final analysis, regulation by the law of value, which, in commodity economy, plays a regulative role in the proportionate distribution of social labor. But, instead of directly using labor time as a means of regulation, the law of value can only play its role through prices centering around the fluctuation of value in the event of any contradiction between supply and demand. Negation of the law of prices, geared to the motion of value, under the socialist system and negation of the role of the mechanism of supply and demand actually means the negation of socialist commodity.

However, market regulation has certain blindness and limitation. Although a socialist market precludes speculative capital, there are still conflicts of material interests among different enterprises and conflicts between the state (including the central and the local authorities) and the enterprises, or between the whole and the partial interests. Therefore, the proportion of social labor distribution is subjected not only to the laws of proportionate distribution, but also to the influence of people's material interests. For example, during the present readjustment, the machinery and power trade is generally "underfed" and many factories are vying with one another for the production of goods in short supply. If, under such conditions, the state does not carry out overall planning, a new imbalance may ensue. That is why market regulation must be incorporated in planning and be guided by plans and cannot be anarchic.



To avoid the blindness of market regulation, the machinery and power trade has adopted the following measures: First, the contract system for productions, supply and marketing should be popularized. The tasks stipulated in the state plan should be covered by the production-supply-marketing contract, which will serve as a means of insuring the completion of the tasks. Other tasks undertaken by the enterprises should also be covered by contracts and included in the plan so as to insure a production-supply-marketing balance. Secondly, the key items passed down by the state should be produced and marketed according to the plan, but the handling of spare parts and accessories and other machinery and power products should be left to the discretion of the enterprises. In handling orders, the enterprises should attend to those of the state first and those of the localities later; those for key items first and those for ordinary items later; and those included in the plan first, and those not included in the plan later. Should there be any conflict between contracted tasks and state-assigned tasks, the state-assigned tasks must be first completed, although the contracts for other tasks should still be valid, except for a postponement of the delivery date.

3. As relatively independent commodity producers, the enterprises should have the right to manage their own affairs, and this right must be guaranteed.

Whether an enterprise has or has not the right to manage its own affairs makes a lot of difference. In the machinery and power trade, the Taiyuan Mining Machinery Plant was a well-known "hungry" plant because it was always "underfed." This year, its assignment from the state was only for 1,020 tons. After this plant was designated as an experimental plant in the expansion of power, it entered the market and actively generated its own business. It has now received orders for nearly 4,000 tons in addition to 15 sets of plate-bending machines.

With the acquired rights to manage their own business, state-run enterprises should likewise become relatively independent commodity producers, and, under the leadership of the unified state plan, should manage their own business and financial matters with the responsibility for their own profits and losses. According to its own nature, economy under the system of ownership by all the people should have a unified accounting, unified allocation and unified distribution to the exclusion of commodity production and commodity exchange. However, according to our experiences, the system of ownership by all the people has marked features of equalitarianism and "eating out of the same pot," with the result that the enterprises became appendages to the higher administrative organs. Obviously, this type of ownership by all the people is incompatible with the nature of productive forces in their present stage of development. A fully mature system of ownership by all the people should be consistent with the overall socialization of production, but it is obvious that our productive forces have not yet developed to this stage. Productive forces in their present

stage do not permit the use of a ration system for more than 300,000 enterprises and more than 100 million workers and staff members in our country. The state cannot possibly undertake such a task. Restructuring the system of ownership by all the people does not mean the change of ownership by all the people into ownership by groups or by collectives. Instead, it only aims at an readjustment of the relationships between the central and local authorities and between the enterprises and the workers inside the system, and at the vigorous development of commodity production and commodity exchange in the system. Now that the machinery and power enterprises have certain authority to produce and to market their own goods, it is necessary to expand their power in other respects, to reform the system of planning in such a way that the mandatory nature of plans should be combined with its guiding nature, and the focus of state planning should be on medium and long-range plans for the guidance of the enterprises. The enterprises should be permitted to work out their own medium- and long-range plans, based on state plans and market demands, and annual plans based on supply-marketing contracts. They should also be permitted to raise their own funds for expanded reproduction, to select and employ their own workers and staff members and to dispose of their extra equipment and raw materials.

4. It is necessary for the state to practice the system of economic regulation by using various economic means and economic levers to regulate market relations. First, the system of pricing should be restructured. At present, the prices of some machinery and power products are not adjusted in time to keep pace with the rise of labor productivity, and this tends to protect the backward units. The dispersed chaotic and self-contained nature of the machinery and power trade has remained unchanged for a long time and adjustments for goods in excessive or short supply cannot be made simply because of the system of pricing. Secondly, the systems of credit and taxation should be reformed so that they can become powerful means of planned regulation. According to the present system of taxation on products, the tax rate increases in direct proportion to the extent of specialization and cooperation. This will encourage the idea of being "large and all-inclusive" or "small and all-inclusive." Furthermore, there should be economic legislations to safeguard legitimate rights and to arbitrate in economic dispute among enterprises.

5. The means of production should be commercialized, and more avenues of circulation should be opened in order that planned distribution can be combined with free commercial transactions.

There are many defects in the system of unified procurement and unified distribution. First, there is dislocation between production and demand. The Zigong Salt Production Plant in Sichuan needed some sealed machinery parts, but the material departments did not supply them and they were not available in the market. Finally, it had to use asbestos as a substitute. It was not until these people saw the advertisement put up by the Dongxin

First, Jiangsu Plant is reported in the newspapers that they could buy these needed parts, even though these two plants were in the same neighborhood. Secondly, too many levels are involved and the procedures are complex. The Ningbo Electric Meter Plant wanted a set of 125-ton die casting machines. The requisition was passed from the municipality to the province, from the province to the ministry and later to the State Planning Commission and the General Materials Bureau. Many reports were written, and bearing a large number of seals, and several years were spent in a fruitless attempt. However, as soon as these people stepped into a goods fair, the machine was obtained. Thirdly, economic result is not considered and with the economic contacts between different areas increased, materials have to travel to and fro. The Jiangsu Machinery and Power Company distributed to the Wuxi Radio Plant a set of grinder produced by the Wuxi Machine Tool Plant. The two plants in Wuxi were only 5 kilometers apart, and yet the goods could not be directly delivered. Instead, the grinder had to go all the way to Nanjing and double back to Wuxi. Fourthly, it tied the hands of enterprises, because if the material departments do not place their orders, the plants cannot plan their own production. What they have produced are sometimes not procured, and they are not permitted to sell them directly. The CO 530 and CO 316 high precision machine tools for making instruments and meters, and the direct lathe produced by the Shanghai No. 12 Machine-tool Plant were classified by the material departments as goods in excessive supply. Therefore, these departments refused to procure them. Yet as soon as production and demand came face to face, order for 200 set were received in a single morning.

The entry of machinery and power products into the market has created many new forms of transaction and cleared many avenues for the circulation of the means of production. Among them, may be mentioned the nonscheduled goods fairs, the year-round goods fairs, the retail department for the enterprises' own goods, consignments to commercial departments, processing customers' materials, compensatory trade, maintenance and repair service stations, correspondence purchase and so forth. These forms have broken the monopoly of the material departments, and made circulation more free.

The direct contact between production and demand for machinery and power products has reduced the links in circulation, saved nonproductive expenses, and facilitated market surveys. Production and marketing by the same enterprises also constitute a necessary form of material circulation. However, direct contact between production and demand does not mean negation of the necessary division of work between industry and commerce, and production and marketing by the same enterprise cannot replace the other forms of transaction. Now, salesmen are running around the whole country and buyers wandering from place to place, because of the system of centralized distribution of materials and through no fault of market regulations. We favor direct contact between production and demand so that

accept any business even though it is urgent to their diet steps. Furthermore, production and marketing are disjointed. Foreign traders must look at the samples before deciding on their choice, but since the plants have no idea of market conditions at all, they cannot produce according to the customer's requirements. Worse still, the present method of procurement has severed the relations of material interests between the foreign trade department and the plants, because gains or losses do not affect the plants at all. This will not arouse the enthusiasm of the enterprises to help earn more foreign exchange.

8. Economic restructuring must overcome obstacles in its progress.

The entry of machinery and power products into the market has brought production and demand face to face, so that production can be organized according to demand. This has smashed the system of planning characterized by the centralization of power, and eliminated blindness in production. Selective purchase according to demand has also broken down the old regulations of unified procurement and distribution of materials, and cleared the way for the circulation of the means of production. The development of economic relations between trades and zones has eliminated the restriction imposed by the administration system and the administrative zones, and pounded at the idea of "large and all-inclusive" and "small and all-inclusive" which tends toward the creation of "separatist regimes." Negotiated transactions to a certain extent break the pattern of unified prices and give more scope to the role of pricing as a lever. Embracing the business idea of serving the customers wholeheartedly overcomes the tendency of stressing production and neglecting business operation. When all these dogmas and conventions are removed, the enterprises will be in higher spirit and the workers will be more energetic. Even the machinery, which has been left idle, will become active. After all, the productive forces, after breaking down the restrictions of the old system, will be emancipated. This will be a triumph of socialized machinery production over the self-sufficient small production and a challenge by the socialist concept of commodity economy to the concept of natural economy.

The use of market regulation for the machinery and power industry is only a prelude to economic restructuring; yet it has already encountered numerous obstacles. These obstacles have come from the pernicious influence of the ultra-leftist line pushed by Lin Biao and the "gang of four," from the effects of capitalist business style and so forth. For example, some people have equated market regulation with capitalism, and called it a departure from the classics and a rebellion against orthodoxy. Some people throw parties, send gifts, offer or accept bribes, and so forth. Some departments and areas, in the name of "protecting local industry" imposed blockades and set up "separatist regimes" in order to prohibit outside products from entering their local market and to prevent competition. Some leaders of enterprises are in the habit of "eating out

production will be based on demand; division between production and marketing so that each side can play a more effective role; and opening more avenues in order to break the monopoly.

6. It is necessary to reorganize the machinery and power industry according to the principle of specialization and cooperation.

The present "two manufacturing systems" in the machinery and power industry has artificially divided the unified market into different independent spheres in different areas and different trades, with the result that many articles suitable for mass production has to be produced in small lots by different units. The plants having advanced equipment are operating under capacity while those plants with high consumption of raw materials and producing poor quality goods have to fight a war of attrition. There are 130 automobile plants in the country, and this is the largest number for one country in the world, but the output is only 140,000 cars and ranks 22nd in the world. Machine-tool plants are even more. In recent years, the output of machine-tools has more than tripled the planned target, and the vast majority of them are popular goods produced by the nonmachinery system. In Zhejiang Province alone, there are 625 machine-tool plants or branch plants. Therefore, the consolidation and reorganization of the machinery and power industry according to the principle of specialized cooperation and rational economics should be no longer delayed.

Specialized companies and joint companies are the outcome of centralized and concentrated production. The reorganization of socialist industry can be carried out according to plan. However, if we use purely administrative methods instead of providing the necessary economic conditions for specialization and cooperation, so that enterprises of the same categories will occupy equal positions in the market, the situation of "large and all-inclusive" or "small and all-inclusive" cannot be rapidly changed. At present, there are outcries among enterprises producing the same category of goods, for forming joint companies for the marketing of the products of state-owned enterprises. These companies will undertake the tasks of receiving orders, selling and distributing goods, and conducting market investigations. In fact, this type of joint company resembles syndicates in an elementary form. We can imagine that through joint operation in commerce, these companies may further develop into joint operation in production and gradually become a joint company of specialized companies like a "dragon" of production, supply and marketing. At that time, the element of planning in market regulation will be further strengthened instead of being weakened.

7. It is necessary to restructure the foreign trade system, and readjust the relationship between industry and trade to help expand the export of machinery and power products.

The original system of foreign trade control is too rigid, and the enterprises do not have any decision-making power at all. Thus they cannot



of the same pot" and find market regulation too much of a strain. Some people who consider market regulation a nuisance to the established system and therefore detrimental to the interests of their own departments, have to impose various obstacles, and so forth. From this, we can see that it would be naive to think that readjustment and restructuring can be just plain sailing.

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## GENERAL ECONOMIC INFORMATION

### ECONOMIC COOPERATION INCREASES IN SICHUAN PROVINCE

OW131222 Beijing XINHUA in English 1207 GMT 13 Aug 80

[Text] Chengdu, August 9 (XINHUA)--Joint enterprises and agricultural-industrial-commercial complexes are expanding rapidly in Sichuan Province, southwest China. Factories that once had hardship are improving and making profit through economic cooperation with those that have a strong economic foundation and good methods of work in the province-wide industrial readjustment.

The Nanshan Chemical Plant in Chongqing, a southwest China industrial city, was a small collective plant which could make only three kinds of chemical products of low quality at high cost because of its poor equipment and backward technology. In order to change the situation, this plant decided to cooperate with the efficient Chongqing Knitwear Corporation which wanted to expand production but lacked land and labour power.

Within six months, the chemical plant, which halted its production, was retooled for production of undershirts and vests. The People's Bank of Chongqing provided loans of 400,000 yuan. Under the agreement, ownership of the collective plant remains unchanged.

The knitwear corporation trained technicians for the plant, provided material and organized production in accordance with market demand.

Twenty-six farms on Chongqing's outskirts, which had annual deficit totaling 2 million yuan in the past 11 years, combined last year with nearby production teams and established the Yangtze Agricultural-Industrial-Commercial Complex. Agricultural output value in the first six months of this year was 67 percent more than in the corresponding 1979 period and net profits rose 3.7 times. The number of production teams joining the complex has grown from 50 last year to 800 this year.

Economic cooperation with production teams has made possible specialized production. At present, more than 30 cities and counties in the province have already established or are going to establish such enterprises.

## GENERAL ECONOMIC INFORMATION

### BRIEFS

HEILONGJIANG NEW TOWNS--Harbin, 14 Aug--Small industrial and commercial towns have sprung up at the sites of the headquarters of about 300 of the 1,062 rural people's communes in Heilongjiang Province. Nearly 300,000 peasants are working in factories and handicraft shops, as well as in service centers in these small towns. Heilongjiang's communes have a labour force of approximately 4.23 million. About 2.82 million of them are engaged mainly in farmwork and another 1.11 million in sideline production in their villages. These small towns are the economic centers of the communes, and peasants from nearby villages come there to sell the produce of their production teams or from their private plots and sidelines. These are also cultural and educational centers where schools, cinemas and theatres are concentrated. [OW141031 Beijing XINHUA in English 0742 GMT 14 Aug 80 OW]

SPECIALTY FOOD RESTAURANTS--Beijing, August 12 (XINHUA)--Beijing residents and tourists will soon have a chance to taste Tianjin "goubuli" dumpling at the Tianjin Goubuli Dumpling Restaurant to be opened in Beijing. This will be the first of a series of local specialty restaurants to be set up in Beijing through cooperation between Beijing and other places in China. The Hubei and Jianxi Restaurants, which had been closed for years, are to be reopened. The Yanji Cold Noodle Restaurant, a northeast China specialty and the Xi'an Canteen featuring Shaanxi style cooking, will be expanded. A number of restaurants of the Shanghai, Guangdong, Anhui and Guangxi schools will be opened on a cooperative basis. The city food authorities said that cooperative efforts are the best way to speed the development of the food industry in the capital. [Text] [OW120742 Beijing XINHUA in English 0727 GMT 12 Aug 80]

CSO: 4020

## MINERAL RESOURCES

### BRIEFS

HUNAN METALLIFEROUS DEPOSIT--Hunan Province has recently discovered an exceptionally large metalliferous deposit which includes tungsten, tin, molybdenum, bismuth, and other metals. It is being said that exploration to date has shown that the tungsten in this deposit is greater than that in the Soviet Union or Canada, and is even greater than that in the United States, which has fairly abundant tungsten deposits. Geological survey workers in Hunan also say that the deposit has a considerable amount of molybdenum, bismuth, tin, and fluorite. In addition, there are quite a few associated elements, including beryllium, copper, niobium, tantalum, etc. The deposit is located in Chen County in Hunan, in the middle of the Wuling range. [Beijing RENMIN RIBAO in Chinese 16 Jul 80 p 1]

CSO: 4006

## CAPITAL CONSTRUCTION

### INVESTMENT IN CAPITAL CONSTRUCTION STUDIED

Beijing JINGJI YANJIU [ECONOMIC RESEARCH] In Chinese No 6, 20 Jun 80  
pp 26-32

[Article by Lin Senmu [2651 2773 2606] and Tan Kewen [6223 0334 2429] of State Capital Construction Commission and Zhou Shulian [0719 0647 5571] of Industrial Economic Research Institute of Chinese Academy of Sciences: "On Getting Better Returns from Investments"]

[Text] The question of investments in capital construction is a very important one in socialist economic construction. It is true that the speed of development in national economy is determined by the amount of investments; but it is also true that effective use of investments has a decisive effect. Given a fixed amount of investments, better use will produce greater returns and faster economic development. Under existing conditions in our country, effective use of investments is even more important. We must regard better economic returns from investments as the main criterion of success in implementing the eight-character principle of "readjustment, restructuring, consolidation and improvement" on the capital construction front.

#### Urgent Need for Better Returns from Investments

We have achieved great success in capital construction since the founding of the People's Republic. The returns from investments in capital construction was relatively good during the first five-year plan. However, beginning with the second five-year plan, the returns have shown a downward trend, with the exception of the 3 years from 1963 to 1965. The situation gradually improved after the downfall of the "gang of four," but the returns from investments now are still far behind those of the first five-year plan. This situation is unfavorable to socialist construction and the progress of the four modernizations.

Let us first look at the effects of capital construction on fixed assets, which is an effective way of assessing investment results. From 1952 to 1978, our capital construction added 410 billion yuan's worth of fixed assets, and this amount was only 68 percent of the total investments, which



is obviously a very low rate. Because of this low rate, there have been many projects under construction, or the so-called half-finished projects, for a long time. In 1978, the amount of funds tied up in these half-finished projects accounted for 150 percent of the total investments in the same year. It was only 85 percent in the Soviet Union and 40 percent in the United States. At present, our country is in need of funds more than ever for increasing our fixed assets. In 1978, the budgeted investments added to the value of materials, equipment and funds tied up by the projects under construction for many years totaled 120 billion yuan. The newly added fixed assets in that year was only 30 billion yuan, meaning that for every 100 yuan of newly added fixed assets, more than 400 yuan was used.

Let us next look at the construction period and the prices of construction. The construction period for large and medium-size projects in our country averaged 6 years during the first five-year plan. After the fourth five-year plan, the average period was increased to 11 and a half years, nearly doubling the length of the previous period. In 1979, among the projects under construction, each requiring 5 million yuan or more in investments, more than 300 had been under construction for 15-20 years; and more than 100 had been under construction for more than 20 years. The very long construction periods necessarily lead to increased construction costs. If we compare the first with the fourth five-year-plan, we can see that the average investment in the comprehensive production capacity for each ton of steel was raised from 1,342 yuan to 2,452 yuan; the average investment in the mining capacity for each ton of coal was increased from 56 to 119 yuan; and the average investment in each kilometer of newly constructed railway was raised from 570,000 yuan to 1.93 million yuan. In some cases, the increase of prices are justified. For example, technological advancement leads to a higher organic composition and requires more investments in the production capacity of each unit. The increased prices of construction materials, machinery and power equipment, and the changes in the conditions of construction, should raise the prices of construction. However, the increase of some other prices are not justified. According to investigations conducted by the banks, among the 45 civilian projects completed in 1978 totaling a construction area of 119,000 square meters, the average construction price for each square meter was 110 yuan, an increase of 46 yuan over the same type of construction project completed before 1966. Of the increased portion, 56 percent was justified and 44 percent was not.

Let us again take a look at the investment coefficient (investment coefficient refers to the amount of increased investment required for increasing every yuan of national income. In the United States and Japan, it is called capital coefficient.) This index reflects not only the situation of fixed assets resulting from investments but also the way the fixed assets thus derived is used later, and can help us determine the ratio between the speed of the growth of the national income and the speed of investment growth. The amounts of investments required for the increase of every yuan of national income in different periods are as follows: In

the first five-year plan period, 1.68 yuan; in the second five-year plan period, 73.7 yuan; from 1963 to 1965, 0.92 yuan; the third five-year plan period, 2.32 yuan; the fourth five-year plan period, 3.76 yuan; and from 1976 to 1978, 3.20 yuan. From this, we can see that for every yuan's increase of national income, our investments in recent years have almost doubled. The average investment coefficient from 1953 to 1978 was 3.18 yuan. From 1956 to 1976, the U.S. capital coefficient was 3.12; Japan's was 3.1; West Germany's was 3; England's was 2.8; and France's was 2.9. Since our technological level is far below those of these countries, it is only reasonable that our investment coefficient should be lower. Yet it is actually higher. This shows the poor return from our investments in capital construction.

Now let us take a look at the time required for the investments to be recovered. The period for investment recovery means the length of time required for the amount of investment to be totally recovered from the profits and taxes paid by the enterprises. In a certain sense, this index can more accurately reflect the economic results of investments. In our country, the investment recovery period obviously tends to be longer. According to a typical investigation conducted by the First Ministry of Machinery Building, during the first five-year plan period, the investments in large and medium-size projects could be recovered 3.5 years after their completion. During the third five-year plan period, among 15 projects, the investments on 10 of them were recovered in an average period of 7.5 years; and investments on the remaining five are still not completely recovered. Out of all projects completed in 1970, none of them has yet enabled the investments to be fully recovered. In the machinery trade, the period of investment recovery has been at least doubled. According to statistics from another source, our industrial investments from 1952 to 1978 was 350 billion yuan, the income from profits and tax totaled 800 billion yuan, and it took generally 10 years to fully recover the investments. In Japan, it took 3 years; in the United States, 4 years; and in the Soviet Union, 5 years. Theirs are all shorter than ours.

There are still other ways to assess the result of capital construction investments. Yet from the several main aspects mentioned above, we can see that the returns from our investments in recent years are much worse than those in the first five-year plan period. This downward trend in our investment results, if not quickly reversed, will have serious consequences. First, it will greatly increase the amount of funds required for the modernization. Our productive forces are still quite weak, and the accumulation of funds is very limited. Because of the poor investment results, we have to spend 2 or more yuan what normally requires only 1 yuan. This will naturally make modernization very difficult. Furthermore, the time required to accomplish the modernization will be prolonged. Since our foundation was originally weak and we had not much to start with, we have already allowed a fairly long period for our modernization program. If the time required for completing the same factory has to be

more than doubled, it will greatly slow down the progress of modernization. Of course, it will also be difficult to improve people's livelihood on the basis of our rapidly developing production. From this, we can see that the adoption of every necessary measure for the improvement of returns from investments is a matter of concern for the state, the collectives and the individuals.

It should be noted that there are already favorable conditions for improving the returns from investments. As mentioned before, the returns from investments during the first five-year plan period were fairly good. The fact that we could achieve good results at the very beginning of our construction program shows that it is entirely possible for us to increase the returns from investments by relying on the superiority of the socialist system. One reason why the returns from investments became worse later was that we did not sum up our experiences and draw our lessons well; but the more important reason was that we had disruptions from the ultra-leftist line pushed by Lin Biao, the "gang of four," and that adviser for a long time. After smashing the "gang of four," we deepened our criticism of this line and continued to wipe out its pernicious influence. The marxist political line adopted by the Party Central Committee taught the whole party about the need to observe objective laws, and to give full play to the superiority of the socialist system in order to speed up socialist modernization. Therefore, as long as we concentrate our efforts on our work and proceed with firm and steady steps, it is entirely possible for us to increase the returns from our investments.

#### Certain Important Factors with Decisive Effects on the Returns from Investments

The downward trend of our investment results after the first five-year plan can be, from the economic point of view, attributed to our mistakes in setting the scale of construction, the orientation of investments, the geographic distribution of our industry, and the management of capital construction. Below, we will study these factors separately.

##### 1. Scale of Construction

The scale of construction has a close bearing on the returns from investments. During the period of the first five-year plan, investments in capital construction amounted to 15.5 percent of the national income, and the outlay on capital construction amounted to 32 percent of the total financial outlay. Such a scale was fairly appropriate, and therefore the returns from investments were good. During the second five-year plan, investments in capital construction amount to 21.5 percent of the national income, and the outlay on capital construction amounted to 46.2 percent of the financial outlay. The scale was far bigger than what was objectively possible. Thus the returns from investments declined. Since the 1970's, we have once again committed the mistake of over-extending our capital

construction front and therefore the downward trend of investment returns could not be reversed. Judging from the history of our capital construction over the past 30 years, we can see certain laws governing these developments.

Why does an over-extended capital construction front bring poor returns from investments?

First, if the scale of capital construction exceeds what is permitted by the availability of financial and materials resources and manpower, the construction projects will not be supplied with the required funds, equipment, material and technological resources in time. For a long time in the past, only 80 percent of the required steel, timber, cement and other materials could be allocated, and when the order was placed, only 80 percent of the allocated amount could be supplied. Then at the time of delivery, only 80 percent of the ordered amount could be received. With the exception of some minor items, only 60-70 percent of the required machinery and power equipment could be received. This inevitably prolonged the construction period and increased the construction cost. Among the 118 large and medium-size projects completed and commissioned in 1979, according to an analysis, 34 of them had been delayed, some of them by as long as 3 or 5 years; and 52 of them required more than the designed time, some of them taking more than the double of the designed time.

Secondly, an over-extended capital construction front takes up too much money, material and manpower from society with the result that some projects, even though completed cannot start normal operation or make use of their production capacity, because of the shortage of raw materials, fuel and electric power, or because of the failure of the auxiliary projects to keep pace. According to the result of an investigation, from 1974 to the first half of 1979, only 38 out of 74 large and medium-size projects and single item projects in Liaoning, or 51 percent of them, could basically bring their production capacity into play according to designed requirements; 18, or 26 percent of them could not fully utilize their production capacity; while 17, or 23 percent of them could not carry out production at all. Similar conditions also existed in other areas.

Thirdly, an over-extended capital construction front takes up too much money, material and manpower, usually leading to an imbalance in the national economy. Some readjustments are necessary and a number of projects have to be stopped or deferred after every readjustment. This not only leaves much "unpleasant after effects" in capital construction and bring economic losses and waste, but also seriously affects the speed of national economic development.

Fourthly, the question of the scale of capital construction is actually a question of relationship between simple reproduction and expanded reproduction. The marxist formulas for accomplishing simple reproduction and expanded reproduction tell us that if the scale of capital construction

is too large, it will not only make expanded reproduction difficult but also cause so much damage that even simple reproduction cannot be maintained. According to statistics, capital construction for every 100 million yuan of investment at present requires an average of 15,000 tons of steel, 30-40 million yuan's worth of machinery and power equipment (or an average of 10,000 tons of steel), 20,000 cubic meters of timber and 20,000-50,000 tons of cement for construction and installation. Based on these figures, our total annual production in 1978 of steel, timber and cement would still be insufficient for the projects still under construction. If so much raw material, fuel and power are taken up by capital construction, how can we have anything left for production by the enterprises? At present, many enterprises in our country do not have sufficient raw and semi-finished materials, and the supply of fuel and power is so tight that they have usually to stop operation for 3 days after every 4 days operation, or stop operation for 4 days after every 3 days operation, mainly because the scale of capital construction was too large. If even simple reproduction has to suffer, how can we possibly raise the returns from investment?

Fifthly, an over-extended capital construction front will inevitably interfere with any attempt to improve people's livelihood. An over-extended construction scale is usually accompanied by excessive accumulations, because they are interrelated. During the first five-year plan period, the rate of accumulation was 24.2 percent of national income. This rate was fairly appropriate and people's livelihood was much improved on the basis of production development. In 1957 the average wages of workers were 42 percent above those of 1952. During the second five-year plan, the accumulation rate was raised to 30.8 percent, and in the years 1958, 1959 and 1960, it was 33.8 percent, 43.8 percent and 39.3 percent respectively. This caused serious strains on the people's livelihood. Since the third five-year plan and the fourth five-year plan, our accumulation rate has been unduly high all along, resulting in reduced income for the people and many problems with people's livelihood which could not be solved in time. According to the basic socialist economic laws, people's living conditions should be gradually improved on the basis of developing production. Failure to improve people's living conditions for a long time will dampen labor enthusiasm and adversely affect the returns from investments. Thus we can see the need for an appropriate construction scale as a means of producing better investment results. First, we must set a rational ratio between accumulation and consumption so that the accumulate rate will always remain at a proper level. Under present conditions in our country, a 25 percent accumulation rate, or thereabout, should be satisfactory. This will insure the healthy development of our national economy and due improvement of the people's livelihood. Secondly, the general scale of projects under construction should be reduced. Reduction of the accumulation rate and the annual investments in capital construction is a necessity; however, unless a number of projects are shelved and the general scale is reduced, the result will be a more widespread decentralization of forces



and a project originally requiring 5 years may drag on to 8 years and the investment results will be even worse. Thirdly, we must work out a balanced allocation of materials so that investments in capital construction will have full material backing. Instead of leaving any gap, we should even include a safety margin. Because of the expansion of local financial power and of the decision-making power of enterprises, there is now a growing number of capital construction projects undertaken with locally raised funds or funds from various other sources in addition to state investments. There will be a large gap between the amount of investments and the amount of materials required. In working out a balanced allocation of materials hereafter, some overall planning and unified arrangements are necessary as a means of orderly control. Finally, the relationship between large, medium-size and small projects should be carefully adjusted. In a certain period, such as a five-year plan period, the amount of funds and materials to be used for capital construction is necessarily limited. If too many extra-large projects are undertaken, a large number of small and medium-size projects urgently needed for the national economy will certainly be elbowed out. Comrade Chen Yun pointed out that only one or two such extra-large projects as the Baoji Iron and Steel Works can be undertaken in each five-year plan. What he said is entirely correct.

## 2. Orientation of Investment

The orientation of investment is another important factor affecting the returns from investments. The same amount of investments will produce different results if their orientations are different, because the orientation of investment is an important means affecting the economic structure. If the orientation of investments is rational, the economic structure will tend to be rational; reproduction will proceed smoothly and investments will have better results. If the orientation of investments is irrational, many problems may crop up in the economic structure which will impede the smooth progress of reproduction and reduce the returns from investment.

The returns from investments in our country was quite good during the first five-year plan period. One of the reasons for this good performance was that the orientation of investments was rational. During that period, the guiding thought for the orientation of investments was priority for the development of heavy industry. Our agriculture and light industry had recovered and developed then, and, at the same time, had great potentials, while heavy industry was very backward. Priority for the development of heavy industry was consistent with the then existing conditions and with the requirements for the acceleration of modern industrialization. Among the investments in the first five-year plan, agriculture took up 7.8 percent, light industry took up 5.9 percent and heavy industry took up 46.5 percent. Out of the total amount of investments, 71.7 percent were productive investments and 28.3 percent were nonproductive investments. This was quite proper. However, since the second five-year plan began, we have tended to stress priority for the development of heavy industry

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sharply increased. Therefore, while studying the effects of the orientation of investments on the returns from investments, we should at the same time note its consequences through its effects on the scope of investments.

From the above analysis, we can see the need to rationally readjust the orientation of investments in order to raise the returns from investments. The way of doing it raises a very complex problem, because we must conduct an all-round study of every orientation of the national economy and the proportionate relationships among various departments, among the agricultural, industrial, transportation and communications and the postal and telecommunications sectors, and among various trades and professions. Furthermore, economy keeps on developing and the proportionate relationships should not remain immutable. Our duty therefore is to conduct in-depth investigations, and to discover the best proportionate relationship for different conditions. From the present situation of our national economic development, we must first of all handle well the investment ratio between industry and agriculture. From 1952 to 1978, state investments on agriculture averaged 12 percent of the total investments on capital construction, which was lower than those of the Soviet Union and the East European countries. In 1979, the "Decisions of the CCP on Some Questions Concerning the Acceleration of Agricultural Development" first demanded that the ratio of investments in agriculture be suitably raised within 1 to 3 years. Secondly, it called for adjusting the investment ratio between light and heavy industries. In 1976-1978, the proportion of investments in light and heavy industries did not reach the first five-year plan level. Hereafter, we should further raise the investment ratio for light industry. Thirdly, the investment ratio for heavy industry should be suitably curtailed, and the investment ratios within the heavy industrial sector should also be handled carefully, with particular attention to the strengthening of energy resources, the rapid development of transportation and communications, and the consolidation and transformation of the machine-tool industry. Furthermore, we have to suitably raise the investment ratio for nonproductive construction and gradually catch up with our work which has been overdue in this area.

We must also stress the need to correctly handle the problem of investment ratios between new construction, repairs and expansions. Out of the total amount of investments in the first five-year plan, 46.5 percent was used for new construction, and 53 percent for repairs and expansions. Since then, the ratio for new construction has constantly been increased, and this was one of the important reasons for the downward trend of the returns from investments. According to an estimate, if an old enterprise is reconstructed at an investment that its production capacity will be equal to that of a new enterprise, there will be a two-thirds saving of money and materials. As a result, only 100,000 enterprises and a fairly good industrial foundation. The production capacity of many enterprises can be greatly improved after some minor adjustment. Therefore, we should very often study the reconstruction of enterprises as our main concern. As long

we must not be misled by the transformation of our existing enterprises; we must resolutely abandon the idea of carrying out new constructions. This is an important measure for increasing the returns from investments.

#### 5. Geographic distribution of industry

The geographical distribution of industry is another important factor affecting the returns from investments. A rational distribution would enable us to take advantage of favorable economic conditions, material conditions and natural conditions to raise the returns from investments, while an irrational distribution would produce the reverse effects. The productivity of a unit varies according to different conditions of investments. For example, the investment in the production of a ton of coal amounts to 29 yuan in Shanxi, but more than 100 yuan in Hubei; the investment in the comprehensive production of a ton of steel amounts to slightly more than 1,000 yuan along the coast; in the interior, however, it is nearly 1,500 yuan. Their profit rates are also different in different places. The average profit rate throughout the country is 24.2 percent, but 34 percent in Guangdong and 7.7 percent in Guizhou. Of course, we cannot determine the industrial distribution because of these factors alone. However, in arranging the items of investments, the indexes should be taken into consideration.

During the first five-year plan period, we were rather attentive to this problem in working out the distribution of construction projects. Some projects were to be carried out in the northeast, such as the expansion of the Anshan Iron and Steel Company, because we wanted to utilize the original materials concentration. Three large chemical industrial plants were built in Hubei because there were two small hydropower stations and a reliable source of power supply. Because of the tendency to overlook the need for coastal industry, Comrade Mao Zedong, in his "On the Ten Major Relationships" pointed out the need to correctly handle the relationship between the coastal regions and the interior, and to fully utilize the industrial advantages and favorable conditions in the coastal regions. We paid our attention to this point and enabled the coastal industry to flourish. On the other hand, however, there was after the first five-year plan damaging effects from this tendency and blind commission resulting in many serious problems in industrial distribution. This is one of the important causes of the low returns from investments. For example, some regions are very rich in agricultural products, resources, but people had to get up their backs to get wheat, cotton, fuel, etc. Some regions were poor in coal resources, but people insisted on opening up mines there. Some regions lack the conditions for producing sugar, but the local people had to build their own sugar refineries. Many big and little starting construction projects were concentrated in the heavy industries and economy features but brought about serious problems in distribution and allocation. Instead of cooperating, some backward regions had to build up chemical fertilizer plants, cotton spinning, woolen textile plants, sugar plants, paper mills, etc. and so

fact, resulting in duplicated construction, waste, of production capacity and large increases of production costs. We have now 130 automobile plants throughout the country, and this number is the largest in the world. Yet the production capacity is only for 180,000 vehicles, and the actual number produced in 1978 was only 150,000, ranking 22nd in the world, and even below India and Brazil. The "Liberation" brand cars are produced in 32 different places. In 1978, the production cost was 9,800 yuan for each car for the No. 1 Automobile Plant; 24,000 yuan for each produced in Kaifeng; and 26,500 yuan for each produced in Jilin.

The improvement of industrial production is now an urgent task confronting us. If we are only concerned with immediate problems and carry out remodelling piecemeal instead of working out comprehensive and long-range plans, this task cannot be accomplished. On the question of socialist construction, people in the past were in favor of producing immediate results, as shown by the demand that all provinces should set up their own independent and complete industrial system. Since some of our provinces are bigger than European countries, it is understandable that in economic construction, they would develop their own initiative and activism. However, if every province were required to set up their own complete industrial system within a short time, it will call for simultaneous actions in various undertakings resulting in a dispersal of forces, duplication in construction, overextended capital construction and decline in the returns of investment.

#### 2. Capital Construction Management

Apart from such factors as construction scale, investment orientation and industrial distribution, management of capital construction has also a decisive effect on the returns from investments. Management includes many aspects. According to our experiences in the past 30 years, however, the most important one is the observance of the procedure for capital construction. The procedure for capital construction is a reflection of the subjective laws in the process of capital construction, and observance of this procedure is in fact a question of observing objective laws which certainly has a strong impact on the returns from investments. In the first five-year plan period, when we were beginning to undertake construction, we followed the Soviet example in the light of our own conditions and formulated certain regulations concerning the procedure for capital construction, including "Article 100" (or regional) planning and city planning, as well as planning without borrowing, and no construction without design. There were also the regulations concerning construction and the so-called "three" (namely, the cadres engaged in capital construction were better equipped, and could strictly observe the construction procedure). Therefore, our basic problems were solved and the system of management was quite sound. Starting from 1956, however, these principles were gradually abandoned, and the methods and "three" (the Communist Party, the government, workers, cadres and construction) and "four" (the Communist Party, the government, workers, cadres and construction) were replaced by "three" (the Communist Party, the government, workers) and "four" (the Communist Party, the government, workers, cadres). This led to a serious deterioration of the management of capital construction, and the returns from investments were quite low.



As a result, particularly because of the "voluntarism" played up by Lin Biao and the "gang of four," observance of procedures for capital construction was openly opposed. Under their influence, there was in circulation the erroneous idea that observance of these procedures would slow down the construction. Thus firm adherence of the procedures was set against the acceleration of construction, and disregard of the procedures became increasingly serious. Some projects were blindly started without ascertaining the local resources and geology. When it was later discovered that the mineral deposit was insufficient and the standard was so low that it was not worth exploiting, the project had to be abandoned half-way. In other cases, heavy investments were made in some projects before the designs of products had been finalized and the required technology had been discovered. As a result, no acceptable products could be turned out for a long time. In still other cases, the production capacity of completed projects could not be utilized because there was no guarantee for the supply of raw materials, fuel and power, or because of the all-round unavailability of the auxiliary projects. Some projects, disregarding economic results, operated at high production costs, turned out poor products, and had to suffer losses for a long time after completion. These were some common sights.

In following the procedures for capital construction, the most important point is to do the advance work well; that is, to be well prepared before starting work. This is of decisive significance on the overall capital construction project. Whether the construction project will meet social needs, whether it is economically rational, and whether it will produce greater, faster, better and more economical results are largely determined by the quality of advance work. Therefore, all new projects, particularly the large and medium-size projects, must strictly follow the procedures for capital construction to do the advance work really well. Yet, for many years, people have actually paid more attention to post-construction work and neglected advance work. In the past several years, while working out the outline construction plan, the slogan "protect the key projects and insure their operation" was raised. This had some positive effects in concentrating the financial material resources and manpower and in insuring the speedy completion and operation of the key projects. However, the slogan "protect key projects and insure their operation" is applicable only after the construction project is started, because it stresses only the need for concentration and management. In really following the procedures and in firmly holding the initiative in capital construction, we must start with the very beginning and do the advance work well in order that every project started will have a steady and reliable foundation. We must make use of this before we can effectively shorten our capital construction period.

#### (2) The Need to Be Prepared to Act

When we begin the advance work investments, we must comprehensively grasp the local conditions and resources. While the principle of readjustment, consolidation, consolidation and improvement is being implemented, we should pay attention to solving the following problems:

First, clear up the projects under construction and reduce the scale of capital construction.

The work of clearing up has been going on for nearly 1 year. A number of projects have been stopped or deferred, and the capital construction front has been somewhat shortened. However, the scale of the projects under construction is still quite large and the front is still long. According to statistics, even though no new project will be added this year, it will still take 6 or 7 more years to complete what is now under construction. Therefore, we should resolutely stop or defer more projects which are not urgently needed, technically backward and economically disadvantageous, or the single item projects. Only thus can we release more financial and material resources to speed up the construction of those urgently needed by the state.

Secondly, launch the "increase production and practice economy" campaign.

There are still great potentials on the capital construction front, as on other economic fronts in the country. A steadfast campaign to increase production and practice economy can produce prompt effects in raising the returns from investment. Through this campaign, we should comprehensively complete our plans for the current year's capital construction, and strive for the commissioning of more projects. We should also launch a "best quality" emulation campaign in order to greatly improve the construction quality and lower the construction cost. We should also carefully regulate the allocation of capital construction materials, strengthen the control of capital construction funds, and examine the use of funds. Any construction enterprise operating under capacity should take the initiative to look for work by breaking down the trade barriers in order to avoid waste from work stoppage. As for the projects whose construction has been stopped or deferred, some precautionary measures against losses and waste should be carried out.

Thirdly, attend to the job of working out medium- and long-range plans.

To basically reform capital construction, we must work out medium- and long-range plans based on scientific data. Capital construction periods are long and it generally takes several or more than 10 years to complete a large or medium-size project. Without fairly steady medium- and long-range plans based on an overall balance, it would be difficult to bring capital construction to a successful conclusion.

Fourthly, actively and yet cautiously reform the capital construction management system.

Our capital construction management system was copied from the Soviet Union in the 1950's. At the time of the first five-year plan, the scale of our construction was small, the forces were concentrated, and we were more cautious. Thus the problems were not clearly revealed. Along with the

development of socialist construction, the defects of this system became increasingly apparent. One of the main defects is that the result of construction, either good or bad, is not in any way related to the economic benefits of the departments, localities, enterprises and workers concerned. This is a lack of economic incentive, and one of the causes of the poor investment results. A comprehensive reform will involve quite a wide area, and must therefore be carried out carefully. We must carefully study and investigate the situation, work out scientific plans for the reform, try them out and then popularize them step by step. We should actively experiment with whatever we have in mind now, including the financing of capital construction with bank loans instead of financial allocations, the experiment with whatever we have in mind now, including the financing of capital construction with bank loans instead of financial allocations, the expansion of decision-making power of enterprises, the running of prospecting and designing units on the pattern of enterprises, and so forth. We should also sum up our experience in the process of experimentation.

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## TRANSPORTATION

### BRIEFS

BETTER CIVIL AVIATION SERVICE--Beijing, August 4 (XINHUA)--China's General Administration of Civil Aviation (CAAC) must make concerted efforts to upgrade management and techniques and improve service, says the PEOPLE'S DAILY in an editorial today. Before the fall of the gang of four in 1976, this important transportation sector operated as an administrative unit. No effort was made to cover costs or make a profit. CAAC always operated in the red. Since then, steps have been taken to run CAAC as an enterprise. Last year the administration began to make a profit. However, the paper points out, there are still many problems to be solved in management, techniques, equipment and service. Domestic and foreign passengers continually complain about CAAC's poor service and lack of efficiency. Measures should be taken to train competent technical personnel and service workers. Regulations should be formulated and enforced so as to ensure safety, punctuality and good service. The managerial experience of foreign airlines should be studied. CAAC should add international routes and domestic flights between major cities and tourist centres. Competent people who have managerial experience should be chosen to head China's civil aviation service. [Text] [OWO41249 Beijing XINHUA in English 0234 GMT 4 Aug 80]

ELECTRIFIED RAIL SECTION--Beijing, August 8 (XINHUA)--A 235-kilometre electrified section of the Xiangfan-Chongqing railway line began operating today. Altogether, 646 kilometres of this vital artery linking central and southwest China will be electrified. The first stage, opened today, is all within the borders of Hubei Province and runs from the industrial city of Xiangfan to the town of Hujiaying. Another 127 kilometres of electrified track, from Hujiaying to Ankang County in Shaanxi Province, will open in October. The other electrified lines, totalling 1,031 kilometres, are now in operation. They run between Baoji, Shaanxi Province, and Chengdu, capital of Sichuan Province, and between Yangpingguan, Shaanxi Province, and Ankang County. Later this year two more electrified sections will open--the 120-kilometre section between Shijiazhuang, capital of Hebei Province, and Yangquan, Shanxi Province, one of the country's major coal producers, and 158 kilometres of track between Baoji and Tianshui, Gansu Province. The Baoji-Tianshui section is part of the main line from Lianyungang in Jiangsu Province to Lanzhou, capital of Gansu. [Text] [OWO92350 Beijing XINHUA in English 1220 GMT 8 Aug 80 OW]

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